INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

Special Report on Renewable Energy Sources and Climate Change Mitigation

Expert Review of the First Order Draft
Dec 14, 2009 – Feb 8, 2010

Chapter 11

Disclaimer:

As part of its commitment to openness and transparency, the IPCC releases drafts that have been submitted for formal expert and/or government review, review comments on these drafts, and author responses to these comments after publication of the associated IPCC Report or Technical Paper. During the multi-stage review process, expert reviewers and governments are invited to comment on the accuracy and completeness of the scientific/technical/socioeconomic content and the overall balance of the drafts. Therefore, review comments and author responses should be considered within the context of the final report. Drafts, review comments, and author responses are pre-decisional materials that are confidential until publication of the final Report or Technical Paper; they are not the results of the assessment and may not be cited, quoted, or distributed as such[1]. Only the approved, adopted, and accepted Reports or Technical Papers may be cited or quoted as the results of the assessment.

[1] *see <<http://ipcc.ch/pdf/ipcc-principles/ipcc-principles-appendix-a.pdf>>, Section 4.1 and clarification in decision 8 on procedures taken at the 33rd Session of the Panel <<http://www.ipcc.ch/meetings/session33/ipcc_p33_decisions_taken_procedures.pdf>>*

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Sugiyama (CRIEPI)	11	-	-	-	-	-	-	-	The report needs a sistemic description of heat pumps. I suggest ch1 introduce heatpumps, ch8 discuss integration with energy systems, and ch 10 and 11 discuss mitigation and policy aspect of heatpumps.	will work to include in 11.5 as relevant
Philibert (International Energy Agecy)	11	-	-	-	-	-	-	-	The structure of this chapter looks confused. Please move section 11.3 'key drivers, opportunities and benefits' before 11.2 'Current trends'. Section 11.7 'Structural shift' should ☐ at the least ☐ be renamed. It reads more like a concluding section for the entire chapter ☐ it does not add any new material, but, rather, draws individual strings together from previous sections. The individual focus areas of the chapter are not given equal weighting: financing and investments are only devoted a few pages while the bulk is focused on policy & implementation.Most sections do not distinguish clearly, where they ought to, between hydro and non-hydro 'new' renewables (e.g. wind, solar PV, concentrating solar power, geothermal, small hydro, marine energy, etc.) because the policy & financing needs as well as the implementation challenges differ significantly. Large-scale hydro is a mature technology competitive in most locations.	will address whatever possible here. We cannot change the order of sections, which were approved by the IPCC Bureau.
Gagnon (Hydro-Quebec)	11	-	-	-	-	-	-	-	The whole chapter implies that large hydro does not exist as a renewable source. This is not credible within the overall approach of this Special Report. The overemphasis on a few documents (such as REN21) is not compatible with IPCC practice. Please review the overall chapter to integrate large hydro potential in most discussions. The financing of large hydro project is a real issue, that is well documented. Maybe J.M. Deverney who is co-author for the hydropower chapter could be consulted.	Technology integration is needed, 'renewable' versus low cabon (but also see The World Commission on Dams")
Pehnt (Institute for Energy and Environmental Research)	11	-	-	-	-	-	-	-	This chapter is very helpful. However, it contains very little information on how to implement RE policy such as FITs or quotas in developing countries and how a possible financing mechanism for such systems could look like.	will revise relevant section to make more useful
Mu�oz (Pardee Center, Boston University)	11	-	-	-	-	-	-	-	Too reliant on Ren21 reports. Given recent controversies in sourcing from grey literature, better to go to the original REN21 sources when possible	where other literature is available, it will be used. But some information is available only from REN21
Mu�oz (Pardee Center, Boston University)	11	-	-	-	-	-	-	-	Use of word feed-in tariff. Consider whether feed-in law would be preferable, since some systems with the premium are not tariffs, and tariff is a word with other connotations in trade that could be mis-represented by policymakers not familiar with the mechanism.	Rejected - most commonly known by this name, and we will define and make clear in text.
Yamaguchi (The Institute of Energy Economics, Japan)	11	-	-	-	-	-	-	-	We may need the role of international cooperation and the role of international organization from the point of policy	will incorporate if/where relevant
QUILES (Ministerio de Agricultura, Ganaderia y Pesca)	11	-	-	-	-	-	-	-	World Energy and Climate Policy. SRREN_Draft1_Review_Ernesto_Quiles_Material_04	no comment, but will try to review materials
Haum (German Advisory Council on Global Change)	11	-	-	-	-	0	-	-	Very well writen, clear and plausibel overview of RE policies :-) Thank you, all authors	thanks

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	-	-	-	-	-	-	-	The alternative objective in comment no.2 requires more complex policy design and evaluation (incl. serious macro-economics), in which obstacle removal and phase-wise support are only a part of the strategic challenge	not appropriate for ch. 11

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kammen (University of California, Berkeley)	11	1	-	-	-	-	-	-	"Another key limitation of cash flow positive requirements is that for 'big-ticket' items such as heating and cooling equipment, high efficiency windows, and reflective 'cool' roofs, expecting the energy savings to cover the full cost of the item is impractical and counter-productive. A new furnace, for example, primarily provides heat ☐ not energy savings. Allowing a citizen to replace a furnace earlier than they would otherwise and with a higher efficiency rating than they would otherwise provides important public and private benefits. However, the energy savings should not be expected to cover the cost of the furnace to be 'cost-effective' the energy savings should only be required to cover the additional costs of the increased efficiency, not the heating services the furnace provides. To enable these kinds of important improvements, PACE programs need to have more flexibility in the scope of eligible upgrades. In addition, we note above that most improvements have public benefits in addition to the private benefits that accrue directly to the homeowner. To encourage a scope of work that includes these public benefits we must consider direct public incentives to support these improvements (Kammen, 2009). We consider the Retrofit for Energy and Environmental Performance (REEP) provisions in the American Clean Energy and Security Act to be an excellent example of how we might structure a federal incentive program to complement effective local PACE programs. REFERENCES Eichholtz, Piet, Kok, Nils and John M. Quigley (2009) ""Doing Well by Doing Good? Green Office Buildings,"" UCEI, August 2009: http://www.ucei.berkeley.edu/PDF/csemwp192.pdf. Fuller, Merrian C., Portis, Stephen and Kammen, Daniel M. (2009) 'Towards a low-carbon economy: municipal financing for energy efficiency and solar power,' Environment, 51 (1), 22 ☐ 32: http://www.environmentmagazine.org/Archives/Back%20Issues/January-February%202009/FullerPortisKammen-full.html Griffin, Ann (2009) 'Certified Home Performance: Assessing the Market Impacts of Third Party Certification on Residential Properties,' Earth Advantage Institute, May 2009. Kammen, D. M. and Nemet, G. (2007) 'Energy Myth Eleven ☐ Energy R&D Investment Takes Decades to Reach the Market,' Energy and American Society - Thirteen Energy Myths, Marilyn Brown and Benjamin Sovacol, editors (Springer, The Netherlands), pages 289 ☐ 309. Kammen, Daniel M. (2009) 'Financing energy efficiency,' Earth 3.0 (Scientific American), 21: www.SciAmEarth3.com. Nemet, G. F. and D. M. Kammen (2007). ""U.S. energy research and development: Declining investment, increasing need, and the feasibility of expansion."" Energy Policy 35(1): 746-755. Nevin, Rick and Gregory Watson (1998) 'Evidence of Rational, Market Valuations for Home Energy Efficiency,' The Appraisal Journal, October 1998. Oakridge National Laboratory (ORNL) (2002) 'Meeting the Challenge: The Prospect of Achieving 30 Percent Energy Savings Through the Weatherization Assistance Program,' Prepared for the US Department of Energy, May 2002: http://weatherization.ornl.gov/pdf/Con-479%20May22-FINAL.pdf .	To be included.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kammen (University of California, Berkeley)	11	1	-	-	-	-	-	-	"Policy and Financing Tool: Property Assessed Clean Energy One energizing solution has emerged from a simple observation: municipalities routinely lend money for residential upgrades that benefit individuals and the community, such as putting power lines below ground. Why not do the same for clean energy? Berkeley, Calif., has pioneered such a program, called Clean Energy Municipal Financing. It allows residential and commercial property owners to install improvements in their buildings. The city pays the up-front cost and the individuals pay that back through a special fee on their property tax bills, spread over 20 years. A number of U. S. cities have adopted this model, ten U. S. states have passed enabling legislation, and the Waxman-Markey Climate Change Bill that passed the U. S. House of Representatives includes this mechanism. Internationally a number of European municipalities are exploring this tool, as is the case in Japan and Korea. The Berkeley loans, made at low interest rates, will first go to property owners for installing needed energy efficiency improvements such as tankless hot-water heaters, energy-saving windows and high-efficiency lighting. The owners can then advance, if they want, to installing rooftop solar-power systems. Trials with the solar component are already underway. While there is a dearth of large-scale studies using measured data on energy savings from multiple efficiency measures in homes, and savings potential varies widely with climate and local energy prices, this modeled level of savings is achievable according to the experience of programs such as Midwest Energy in Kansas and Long Island Green Homes in New York, which have cash flow positive program requirements, and is supported by the experience of the Weatherization Assistance Program (ORNL 2002). However, we stress that encouraging only strictly cash flow positive improvements will seriously limit the scope of PACE programs, and undermine our ability to address the pressing issues of energy security and climate change. There are many reasons to encourage improvements that go beyond a strict cash flow analysis. These calculations ignore the public benefits of increased energy independence and a reduction in green house gas pollutants. They also do not recognize the multiplier effect from increased economic activity within a community, nor do they recognize the 'learning by doing' benefits of encouraging increased retrofit activity and lowered costs that come from the maturation of a new market (Kammen and Nemet, 2007; Nemet and Kammen, 2007). Using a cash flow framework also ignores many of the private benefits. These improvements increase the health and comfort of the home. They also directly increase the value of the buildings. A recent study in the Pacific Northwest showed that home performance-certified homes sold for 3-9% more than comparable homes, and sold more quickly (Griffin 2009). Another study published by The Appraisal Journal found that home values increase between $10 and $25 for every $1 reduction in annual energy bills (Nevin 1998). Similar results have recently be found for commercial buildings, with one study showing that selling prices of 'green' buildings are higher by about 16 percent, and that a one dollar saving in energy costs yields roughly 18 dollars in the increased valuation of an Energy-Star certified building (Eichholtz 2009)."	To be included.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kammen (University of California, Berkeley)	11	1	-	-	-	-	-	-	"Property Assessed clean energy (PACE) financing is not discussed in the text. It is an important and new financing mechanism that is growing rapidly in use. A website devoted to this mechanism is http://rael.berkeley.edu/financing A set of references on this is: Fuller, M, Portis, S. and Kammen, D. M. (2009) 'Towards a low-carbon economy: municipal financing for energy efficiency and solar power', Environment, 51 (1), 22 □ 32; Fuller, M., Kunkel, C., and Kammen, D. M. (2009) Guide to Energy Efficiency and Renewable Energy Financing Districts for Local Governments (The City of Berkeley, CA and the University of California, Berkeley); Kammen, D. M. (2009) 'Financing energy efficiency', Earth 3.0 (Scientific American), 21.	Accepted
Kammen (University of California, Berkeley)	11	1	-	-	-	-	-	-	A case study and a specific box on property assessed clean energy is recommended for Chapter 11	Needs to be included.
Argiri (International Energy Agency)	11	1	1	127	2	Executive Summary	-	-	Overall, this chapter is comprehensive and well written. The Executive Summary is a bit too generic though. I think the messages need to be strengthened. You need to mention the barriers in ES and also say something more about financing.	will discuss key messages
Soliano Pereira (Universidade Salvador - UNIFACS)	11	2	32	-	-	-	-	-	Change the position of this subsection, as the section deals on Barriers to RE Implementation, and it would not be convenient discuss the policies to address it here.	will consider making change
Soliano Pereira (Universidade Salvador - UNIFACS)	11	3	46	-	-	-	-	-	"Drop the words ""and Regional Issues"" from the title. The section does not deal with regional issues."	section title determined by IPCC
Soliano Pereira (Universidade Salvador - UNIFACS)	11	4	17	-	-	-	-	-	Introduce two subsections: one on hydropower and another on biomass. Both RET have strong linkages to planning and land use.	will take into account and contact technology chapter LAs for any relevant literature. Will introduce such subsections if relevant.
Christophersen (Climate and Pollution Agency)	11	5	18	5	18	-	-	-	"""Stable"" here is somewhat relative. It might be a need for stability however also a need for extra incentives in a specified introduction period."	will consider
Soliano Pereira (Universidade Salvador - UNIFACS)	11	5	38	-	-	-	-	-	"Clarify the expression ""on all levels"""	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
DE LA VEGA NAVARRO (National Autonomous University of Mexico)	11	5	35	5	39	-	-	-	"Developed countries must take leadership in the transition to low-carbon economies and their research and technological requirements. However that leadership must not leave out the less developed economies in given regions, like Mexico in North America. It is no longer possible to think that every country will be able to resolve everything alone. The challenge is to create or bolster institutions regionally and sectorally capable of taking initiatives to cooperate, combining knowledge, technologies and financing. The importance of Canadian-US relationship, particularly with regard to energy and environmental issues was shown during Obama first trip abroad as President. He and Canada's Prime Minister launched the Canada-US Clean energy dialogue, a scientific collaborative effort to develop new technologies aimed at reducing GHG emissions and fighting against CC. In the proposals about cleaner energy development as an important component of a strategy for overcoming the crisis the US can forge interesting partnership with Canada, taking into account the two countries degree of development and integration since they have already made substantial investment in research for carbon capture. Will this energy-environmental dialogue extend to Mexico?	will consider the example for use later in the chapter
Christophersen (Climate and Pollution Agency)	11	5	10	5	11	-	-	-	"It would be helpful if you could focus more on which policies that are efficient and not rather than saying ""some policies""."	addressed in 11.5
Garcia (Renewable Energy Center)	11	5	28	5	31	-	-	-	"May I suggest to add ""independence"" among the drivers of RE (ex.: (□) and RE's potential to enchance energy security and independence, to provide energy acces (□))"	independence is editorially considered to be included in 'energy security'
Garcia (Renewable Energy Center)	11	5	25	5	26	-	-	-	"May I suggest to add ""legal"" to the dimensions of enabling environment"	legal is considered editorially to be included in 'institutional'
Praessler (PIK)	11	5	24	5	26	-	-	-	"Merge 2 sentences; cut first"	will consider
Praessler (PIK)	11	5	10	-	-	-	-	-	"Potential to cut sentence ""Some policies has proven efficient and 10□effective, others have not."" --> is implied before"	will consider
Christophersen (Climate and Pollution Agency)	11	5	14	5	14	-	-	-	"Start the sentence with ""Policy instruments□.""""	will consider
Dunn (GE Energy)	11	5	3	5	4	-	-	-	"The point that RE-specific policies are needed beyond a carbon price is important but needs to be reinforced in this chapter or earlier in the report with supporting literature to counter the ""price-only"" argument. For example, Chapter 10, page 7, line 2 refers to low abatement potential below $100/tCO2. Regarding industry support for ""complementary"" policies to rapidly deploy RE, see US CAP ""Blueprint for Action"" at http://www.uscap.org and SRREN_Draft1_Review_Dunn_Seth_Material_07.pdf."	to be addressed in 11.5
Christophersen (Climate and Pollution Agency)	11	5	5	5	9	-	-	-	"This may be partly true but in many cases it is a need for more technology neutral instruments on top of that in order to stimulate the technology development in the best way such as carbon pricing. Proposed change: "" To be efficient broader climate policies such as carbon pricing will need to be supplemented by policies policies specifically targeted to RE in order to .....""""	will consider

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Mu&#65533;oz (Pardee Center, Boston University)	11	5	4	-	-	-	-	-	"use of word ""demonstrate"" too strong. Better ""show"", ""imply"" or similar "	will consider this change
Praessler (PIK)	11	5	35	5	36	-	-	-	1st sent. not neutral enough - why must there be a global partnership for RES? Cut sentence	wording of statement will be revised
Christophersen (Climate and Pollution Agency)	11	5	14	5	16	-	-	-	Again this will need to be qualified. Tailoring to local needs may be needed on one layer but consistency with national policy is also important. See line 19!	will consider
Praessler (PIK)	11	5	32	-	-	-	-	-	Cut sentence, does not add value	will clarify or omit
Kessels (International Energy Agency Clean Coal Centre)	11	5	14	5	23	-	-	-	Delete	reason for deletion unsubstantiated and conflicting with comment 112 from same reviewer
Kessels (International Energy Agency Clean Coal Centre)	11	5	32	5	42	-	-	-	Delete	reason for deletion unsubstantiated and conflicting with comment 112 from same reviewer
Christophersen (Climate and Pollution Agency)	11	5	35	6	10	-	-	-	In our view the text in the summary should include reference to the potential advantages related to integration with other non-climate policies and environmental policies such as air pollution see good examples from Asia and South Africa in ch 11.3.5	Accepted
Pokharel (SNV Netherlands Development Organisation, Nepal)	11	5	-	-	-	-	-	-	innovative implementation approaches and modalities are also needed where market is not matured and creating 'enabling environmnet' takes time	Accepted
Pokharel (SNV Netherlands Development Organisation, Nepal)	11	5	38	-	-	-	-	-	instead of new finance, better new suitable finance	Accepted
Pokharel (SNV Netherlands Development Organisation, Nepal)	11	5	13	-	-	-	-	-	instead of none, better to use most/many of them	will consider
Christophersen (Climate and Pollution Agency)	11	5	2	5	2	-	-	-	Is it possible to say that such policy intruments exist.	the chapter does try to show that such policy instruments do indeed exist for substantial increase of RE
Heinrich (Instituto Meteorologico Nacional)	11	5	32	-	-	-	-	-	It is unclear what is the systematic and evolutionary process the sentence is referring to: the intertwined requirements cannot be themselves the process.	Accepted
Kyte (E.ON AG)	11	5	2	-	3	-	-	-	Market signals are not enough, why, what how? Is Carbon pricing a policy as well? How will they evolve, be influential?	will address in the chapter
Kessels (International Energy Agency Clean Coal Centre)	11	5	1	6	10	-	-	-	Overall a good executive summary brief and to the point.	Accepted
Praessler (PIK)	11	5	1	6	10	-	-	-	Potential to shorten the exec. to 1 page. Currently lengthy explanations and doublings (see ex. Below)	we're consider how to reduce length
Kyte (E.ON AG)	11	5	2	-	13	-	-	-	The executive summary states that RE support policies are several and its now more or less clear what does and doesn&#65533;t work, but there is no dominant approach yet. Should there be one?	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Langniss (Fichtner KG)	11	5	32	5	32	-	-	-	This paragraph is unclear and give no particular information. Delete to shorten the Exec summary	will clarify or omit
Christophersen (Climate and Pollution Agency)	11	5	16	5	23	-	-	-	This part of the text could be shortened and do partly overlap with other text in the summary.	will consider
Hamilton (Chatham House)	11	5	18	5	21	Executive Summary	-	-	Sentence beginning 'Clear, long term consistent signals and robust policies□.' , this needs set in the context of broader energy policy, and add in that fundamental to policy conditions for investors is both reducing risk in investment and making returns sufficiently attractive and stable such that there is high rate of deployment□.	Accepted
Hamilton (Chatham House)	11	5	21	5	23	Executive Summary	-	-	The sentence starting 'Market deployment' doesn't seem orientated quite right although technically perhaps correct, as there is an implication that the purpose of market deployment is about getting tech from R&D into the field. This is a very technology-orientated starting point, whereas, a core driver for RE deployment in many markets is a more straightforward objective to increase the proportion of RE in the energy system (reflected in the number of governments opting for targets in this area), or providing the conditions for doing so (through support incentives such as feed-in tariffs). Of course, if there is a strong industrial policy objective or a clear intent to increase RE diversity then that may mean that the commercialisation of new technologies is a specific objective. It could be useful noting a range of objectives as there may be implications for policy design depending on what governments intend to achieve. The focus on deployment of existing techologies is most relevant for delivering short and medium terms emissions reductions, whereas R&D may not produce commercial product until the 2020-2030 timeframe	will consider
Rosinski (Electric Power Research Institute)	11	6	7	6	8	-	-	-	"Establishing RE as ""the standard energy provider"" is inconsistent with messages in Chapters 1 and 10. "	Standardisation will be ensured, done in coordination with other chs
Klessmann (Ecofys Germany)	11	6	1	6	3	-	-	-	Market entry barriers (grid access, administrative procedures) play an important role in the early phase of RE deployment and should be addressed in the policy design.	incorporated in 11.6
Philibert (International Energy Agecy)	11	6	1	6	1	-	-	-	This is a confusing and misleading assertion. Does it refer to investment in RD&D or deployment in RE, or both?What does 'simple implementation of policies' mean? E.g. Policies and measures to foster investment in the first technology development stages also need to be inserted into a larger coherent framework of policies and cannot stand in isolation at the risk of being non-effective or too costly.	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	6	3	6	5	executive Summary	-	-	Important to reflect policy elements from Ch8 at the end of the sentence starting 'For the efficient integration'. In particular the importance of strategic long term planning for network infrastructure (Ch8 lines 14-16 on page 21) these are a central message for policymakers in the overall document. Ch8 also raises the regulatory implications. I would consider increasing the priority of this within the Executive Summary to place after line 23 (page 5), as this is a crucial issue for policymakers if an optimised, integrated system (within timeframes implied by the scenarios) is to be achieved, as per point above linked to the importance of broader energy policy. It also provides clearer integration between the chapters.	Highlights the large potential of RE, in Ch 11.7, incoordination with Ch 1 and 10
Soliano Pereira (Universidade Salvador - UNIFACS)	11	7	17	-	-	-	-	-	"Drop the words ""best practice""."	Accepted
Mu�oz (Pardee Center, Boston University)	11	7	35	7	40	-	-	-	"From ""the IEA�"" till the end of the paragraph, repetitive, keep references and delete the rest"	Accepted
Klessmann (Ecofys Germany)	11	7	25	-	-	-	-	-	"I suggest to replace ""limited implementation"" with ""limited growth"". Traditional RES-H use is significant in many countries."	will consider change as we edit
McCormick (International Union for Conservation of Nature (IUCN))	11	7	11	7	13	-	-	-	"It might be clearer to put ""To date"" at the beginning of the sentence, before ""wherever there has been □"" "	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	7	15	7	15	-	-	-	"p20, line 3 'innovation investments' linked to R&D, this is probably fairly explanatory, but given the wide berth for innovation above its important not just to use it to mean something is new otherwise it becomes meaningless (if it isn't already - certainly in the policy world the word arises with great frequency). p23 line29-30; infrastructure is defined here, and includes generating facilities, this may imply a direct cross over with what is implied by the term 'deployment'? given that this may be in large on-grid generating facilities such as wind farms. Otherwise it could be defined to mean the underlying delivery infrastructure. p31 line1; 'pulling RE innovations' via feed-in tariffs or quota, it is not clear how the word 'innovation' is being used here. If innovation means R&D then feed-in tariffs do not directly stimulate this, if RE deployment is being referred to, and innovation, in this context, means more general 'new way of doing things', then feed-in tariffs indeed would work. p32 line 12: 'sustainable innovation regimes and operational dialoguing' - this needs to be more readable and explained. p35 lines 20-30 under the subheading 'Technology development' - an integrated approach etc. This uses 'technology development' to mean RD&D, as well as to cover commercial scale manufacturing. 'Technology diffusion process' is then used (line 32) to cover everything (leaving 'deployment' to mean?) P37 lines11-14 then crosses over policies for technology development to RD&D and not FiTs etc. I may be wrong if there is literature that specifically finds that FiTs over a long period are set within a sufficiently stable broader energy policy framework then this stimulates corporate R&D spend, however the main purpose of FiTs is to spur deployment of commercially proven technologies within the energy mix. P64 line 15 Infrastructure: it would help to define this ie is this being used to mean all plant or specifically delivery infrastructure like transmission grids, distribution networks, pipelines etc? In my own work with financiers involved in project finance of mature technologies, the objective of policy is a very important issue, largely as they will want to anticipate whether or how a government might step in and review policy should it not be on track for achieving the objective. Having multiple or unclear objectives is less helpful. A policy designed to stimulate a diversirty of RE sub-sectors, versus a simple least-cost volume implemented, might look very different (noting that FiTs vary by technology; and quota systems can by 'banded' by technology, should tech diversity be a goal.). "	11.2.3 through 11.5.5. First part of comment will be rewritten to address this. Very helpful discussion. We will work to be consistent throughout the chapter (and report) with use of terms and define terms as necessary.
Langniss (Fichtner KG)	11	7	11	7	13	-	-	-	"There are a few countries which have seen growth of RE without govermental intervention e.g. Island. So enter an ""almost"" in this phrase"	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	7	15	7	15	-	-	-	"This is a vocabulary check. This is really noting that a clear and consistent definition of terms is important for policymakers - I suspect varied uses of terms are linked to the way academic research approaches technology and finance, and also that economics uses different vocabulary and starting points. It might be useful to question how a technology focused approach vs an energy policy/ energy systems approach clarifies some of these issues - this chapter has a very heavy 'technology' focused approach, whereas work with financiers indicates that if the energy system and policy across the system is not in place, investment will not flow. To be useful for policymakers it is important that readers have a common understanding of what a phrase means, notwithstanding different researchers defining terms n the context of their own work, and I believe the authors of this chapter are well qualified to do this rather than repeat the literature which may produce multiple overlapping meanings for the same phrase. The importance is that different policy objectives require, for the most part, different policy design: VC is very different from asset financing. Design feature issues are extensively illustrated in the discussion of FiTs and Quota systems in the chapter; and very clearly in the DB Climate Change Advisors report on 'TLC' (Transparency, Longevity and Certainty) and the assessment of feed-in tariffs; as well as clearly in my own work 'Unlocking Finance for Clean Energy: the Need for 'Investment Grade' Policy. As a Chatham House Programme Paper this is not formally peer reviewed, although it has been reviewed by financiers). The list below reflect terms appearing in this Chapter that are ambiguous and open to interpretation, sometimes the meaning is changed by the policy it is linked to. p8 line20 In this line investment in private R&D and infrastructure are referred to, and 'innovation' is defined as 'development and implementation' of new technologies (as well as practices) and also linked to 'structural shifts' (so this sounds like anything that isn't BAU). Is implementation of new techs the same as deployment? or is it commercialisation? p10, line11 refers to R&D and infrastructure and RE deployment, so how are infrastructure and RE deployment different, given that infrstructure is elsewhere defined to including generating plant." Comment continues at "p20, line 3 'innovation investments' linked to R&D"	Accepted
Kessels (International Energy Agency Clean Coal Centre)	11	7	6	7	13	-	-	-	Delete not needed or perhaps just one sentence to cover the growth in RE capacity and production	Rejected - we have to set out the scene
Philibert (International Energy Agecy)	11	7	38	7	38	-	-	-	Germany☐s total 'realisable potentials' (see IEA, 2008a for more details) to 2020 for renewable electricity, heating and transport are in fact larger than those of the United Kingdom☐s ☐ Germany has already exploited more of its realizable potential than the United Kingdom, therefore its additional realizable potential is lower to 2020, precisely because of the implementation of effective RE policies!	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Soliano Pereira (Universidade Salvador - UNIFACS)	11	7	14	7	15	-	-	-	Improve the text. A suggestion: Tailored policies are required to overcome the numerous barriers to RE that currently limit uptake in investment, either in R&D funding or infrastructure deployment.	More on R&D pathway is needed: Nemet, G. F. and D. M. Kammen (2007). "U.S. energy research and development: Declining investment, increasing need, and the feasibility of expansion." Energy Policy 35(1): 746-755.
Soliano Pereira (Universidade Salvador - UNIFACS)	11	7	30	7	31	-	-	-	Include inside the parenthesis the cases of Norway and Brazil, with more than 80% of their electricity based on hydropower. (IEA, 2009, Key World Energy Statistics)	To do
Philibert (International Energy Agecy)	11	7	6	7	13	-	-	-	It is important to distinguish here between conventional (large) hydro and non-hydro renewables, where the former may not have needed targeted policy support because of its competitiveness with conventional fossil-fuel energy technologies!	will consider how to do this as we revise
Praessler (PIK)	11	7	41	-	-	-	-	-	only true in short to medium-term	Accepted
Heinrich (Instituto Meteorologico Nacional)	11	7	22	-	-	-	-	-	The sentence implies that the increased rate of installation is the one who will be mitigating climate change, but this is clearly not the case in reality.	will consider as revised text
Nilsson (Lund University)	11	7	-	-	-	11.1	-	-	Don□t forget large scale hydro. Definition of enabling environment comes very late in the chapter	Accepted
Mu&#65533;oz (Pardee Center, Boston University)	11	7	-	-	-	11.1	-	-	the structure of the intro is confusing and unclear, with a chapeau, two substantive subsections, a recap section and a map. Plus it sounds repetitive. I would eliminate 11.1.3, and merge and shorten 11.1.1+11.1.2	Accepted
Nilsson (Lund University)	11	7	-	-	-	11.1.1	-	-	Explain here what enabling environment is and how it is created (relation to policy and policy instruments)?	Accepted
Langniss (Fichtner KG)	11	8	16	-	-	-	-	-	"""innovative policies, □"" Is that proven, that for a shift really ""innovative"" policies, etc are needed? Couldn't be the known mechanisms be sufficient if they are put in place and enforced? Certaintly, innovations on instruments will occur along the path of structural shift but are they really needed presently? Any proof on this?"	Rejected general request but will focus more with refs
Mu&#65533;oz (Pardee Center, Boston University)	11	8	40	9	1	-	-	-	"delete reference to figures (if comments 10-11 Accepted). Leave sentece ""innovation is a proces over time&#65533; at the other end.""""	have been removed
McCormick (International Union for Conservation of Nature (IUCN))	11	8	34	8	35	-	-	-	"Instead of ""they"" in line 34 and ""governments"" in line 35, it may be clearer to reverse the order to identify the subject of the sentence earlier."	Accepted
Garcia (Renewable Energy Center)	11	8	8	8	9	-	-	-	"May I suggest the following wording: """"An enabling environment combines legal, economic, technological, (□)""""	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	8	7	8	11	-	-	-	"These five dimensions of the concept of ""enabling environment"" are not fully reflected into the sub-sections of section 11.6. An explanation of the reasons why has existed an enabling environment in Germany and not in UK could be illustrative (using the example mentioned in the previous paragraph). It could be elaborated the situation of pre-existence of an enabling environment versus the need of its creation."	will be reflected in "11.6" section, adding case studies

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
MANNEH (MINISTRY OF FINANCE AND ECONOMIC AFFAIRS)	11	8	13	104	8	-	-	-	Areas or ranges that needs to be looked at for possible reduction or shortened of the chapter are stated here	will consider as we revise
NADAI (CIRED)	11	8	9	8	9	-	-	-	civil society also has a roel to play and should be explicitely mentioned, not to be confused with private sector.	Accepted
Mu&#65533;oz (Pardee Center, Boston University)	11	8	5	8	6	-	-	-	Last sentence innecessary and slightly prescriptive. Delete	Not prescriptive as it states "it can be said that…"
Heinrich (Instituto Meteorologico Nacional)	11	8	41	-	-	-	-	-	State specifically the different fases of technology development. This easens comprehension of the passage and prevents the reader from having to jump down to Figure 1 to learn what the different fases are.	Accepted
Pehnt (Institute for Energy and Environmental Research)	11	8	15	-	-	-	-	-	The issue of synergies (and competition) between RES and Efficiency could be further elaborate. At least, I would include references. Here, I would recommend three that deal with that issue: ACEEE and IFEU, see SRREN_Draft0_Review_Pehnt_Martin_Material_01.pdf, SRREN_Draft0_Review_Pehnt_Martin_Material_02.pdf, SRREN_Draft0_Review_Pehnt_Martin_Material_04.pdf	will be addressed in 11.7
Soliano Pereira (Universidade Salvador - UNIFACS)	11	8	3	-	-	-	-	-	Word robust is very vague.	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	8	12	-	-	11.1.2	-	-	Two long explanations on the concepts of innovation (on 11.1.2) and market failures (11.4.1.1) could be eliminated from the text without compromizing the understanding. These concepts are well established, and unless clearly connected to RE could be avoided in the text. Later in the text these two concepts are again redefined."	Accepted
Nilsson (Lund University)	11	8	12	-	-	11.1.2	-	-	""""□use public policy to create supportive environments in which□"" Is supportive environment different from enabling environment?"	consistency will be ensured
Nilsson (Lund University)	11	8	12	-	-	11.1.2	-	-	"What evidence is there that a shift implies ""important changes in societal activities, practices, institutions and social norms.""?? Is this statement substantiated?"	will be addressed in 11.6 and 11.7
Praessler (PIK)	11	8	12	-	-	11.1.2	-	-	Section is very vague and lengthy in description. I would suggest to either shorten sign. or illustrate innovation concept with one clear example taking it through the multiple stages□	Rejected - we need to describe the way RE policy helps / hinders development so will keep overall idea but rephrase
Mu&#65533;oz (Pardee Center, Boston University)	11	8	12	-	-	11.1.2	-	-	See comment 6. Would combine most content with 11.5.1.1	will consider as we revise
Soliano Pereira (Universidade Salvador - UNIFACS)	11	8	40	9	5	11.1.2	-	-	This section could be substantially reduced, with the concept of innovation being eliminated. Therefore, the two figures can be easily dropped from the text.The concept of innovation should be used once adapted to the case of RET and their policies.	much of this has been omitted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	8	-	-	-	11.1.2	-	-	This section, in particular the diagrams used to illustrate innovation, overlap with those used in 11.5.1 Policies for Technology Development p37 and again in 11.6.6 Innovation pathways in the context of a global economy: supporting 'technology transfer', p88-89. This section does not cover issues around a structural shift (which is also covered in 11.7.2). This opening section should link through to that one, and a suggestion, as per overarching comments, is to prioritise more practical information alongside the theoretical: what do governments need to do, over what timeframe, to facilitate a structural shift: the consequence here is surely that a strategic appraoch to infrastructure needs to occur alongside R&D.	will consider as we revise
NADAI (CIRED)	11	9	-	-	9	-	-	-	FIGURE 1 : bottom of the figure, would be good for claity ot find the categories of table 3 p19, so to establish a correspondance between the two / top of the figrue: has to be reworked so as to incorporate civil society somwhere, and the idea that there are steps in public policies towards RE and in civil society relation to new Re technologies (e.g. from scienctific contoversies at early stages of techs, to social acceptance at the mature stage of the tech ...) // fig 1 and 2 are redundant, in their current format.	figure has been deleted
Mu&#65533;oz (Pardee Center, Boston University)	11	9	-	-	-	-	1	-	does add sufficient value for space it takes. Delete	figure has been deleted
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	9	-	9	-	-	1	-	Interesting and important picture, but graphical quality makes it hard to read	figure has been deleted
Londo (Energy research Centre of the Netherlands)	11	9	7	9	11	11.1.2	1 and 2	-	Intuitively, I reckon that the death skulls in the figures relate to the valley of death that any innovative technology should pass through. But please explain a bit more clearly in the text!	To be removed
de Haan (Ernst Basler + Partner AG)	11	9	-	-	-	-	2	-	"Fig. 2 gives no added value over Fig. 1. Especially, the processes that Fig. 2 is supposed to illustrate (""Figure 2 attempts to illuminate the difficulties of taking an idea or a product to full commercialization."") are better illustrated by Fig. 1. Please consider to delete Fig. 2."	figure has been deleted
Praessler (PIK)	11	9	-	-	-	-	2	-	"I would strongly urge to omit this figure! It does not give much value add over figure 1; in fact it is the same information but much worse represented and hard to grasp. "	figure has been deleted
Mu&#65533;oz (Pardee Center, Boston University)	11	9	-	-	-	-	2	-	does add sufficient value for space it takes. Delete	figure has been deleted
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	9	-	9	-	-	2	-	graphical quality makes it very hard to read	figure has been deleted
Langniss (Fichtner KG)	11	10	6	-	-	-	-	-	"""importance"" reads ""important"""	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
McCormick (International Union for Conservation of Nature (IUCN))	11	10	6	-	-	-	-	-	"""important"" instead of ""importance"" role of individuals□"	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	10	4	10	7	-	-	-	"The phrase starting with ""These products□"" is at the same time obvious and vague. It can be dropped or rephrased. Subsequent phrases could also be dropped. "	Accepted
Rosinski (Electric Power Research Institute)	11	10	30	10	31	-	-	-	RE should be considered in the context of a diverse, low-carbon energy portfolio and broader mitigation options.	Will edit
Soliano Pereira (Universidade Salvador - UNIFACS)	11	10	17	10	24	-	-	-	These two paragraphs can be merged, as they say nearly the same thing.	Accepted
Dunn (GE Energy)	11	10	17	10	19	11.1.3	-	-	"As discussed during the expert review meeting, targeting of policies to technology maturity is an important principle. This may be implicit, but adding ""and technological change"" to the end of the ""responding..."" may better convey the dynamism of policy development. With so much adjustment to FIT and quota systems at present, policymakers need to understand that these adjustments are part of the policy process. (This may relate to a suggestion of creating a grid that maps policy types against technology life cycles.)"	Accepted
Praessler (PIK)	11	10	8	-	-	11.1.3	-	-	1:1 overlap with exec sum and much of 11.1-11.2 Here is sign. potential to shorten the text. Maybe even cut 11.1.3 altogether	Accepted
Nilsson (Lund University)	11	10	8	-	-	11.1.3	-	-	Does this section fit better in ES and not introduction, to avoid repetition?	Accepted
Kyte (E.ON AG)	11	10	-	-	-	11.1.3	-	-	Important section with principles of support policies, but relevancy is not clearly underlined by text or lay out.	Accepted
Mu&#65533;oz (Pardee Center, Boston University)	11	10	8	-	-	11.1.3	-	-	unclear why this section is here, very repetitive with executive summary, I would delete (nothing wrong with content, just out of place)	Accepted
SCOWCROFT (EURELECTRIC)	11	10	-	-	-	11.1.3.	-	-	move towards integrated open energy markets, role of companies, moving from fraction of market to large share	Accepted
Philibert (International Energy Agecy)	11	10	-	-	-	11.1.4	-	-	It would be clearer for the reader if this section were placed at the beginning of the chapter rather than on page 10.	will consider this change
Heinrich (Instituto Meteorologico Nacional)	11			-	-	11.1.4	-	-	The only paragraph in this section is a summary of the contents of the sections in the rest of the chapter. However, the tables that follow immediately after have no relation to the previous paragraph. Both tables should first be briefly introduced.	Accepted
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	10	-	11	-	-	-	"1 and 2"	"Consider merging of tables; table 2 in more sophisticated form e.g. also other distinctions such as prices vs. quantities, and level of aggregation on which is steered "	will make this change

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Yamaguchi (The Institute of Energy Economics, Japan)	11	10	-	-	-	11.1.4	-	2	Don't we need any explanation/description of the policies from the supply-side and the differences from the end-use?	X-cutting
Hongo (Japan Bank for International Cooperation)	11	10	34	-	-	11.1.4	-	2	Gov Finance: In addition to ☐Loan guarantee☐, Public finance in the form of co-financing with commercial finance is a useful tool for mobilizing commercial finance and stabilizes the projects. It is better to add its role like ☐Loan Guarantee/Public Private Finance (Co-finance)☐	in 11.5
NADAI (CIRED)	11	11	-	11	-	-	-	-	"1. What abt green labelling. Also not discussed in 11.5.2.. A paper can be quoted : Public and private attitudes towards 'green☐ electricity: the case of Swedish wind power, Energy Policy, Volume 33, Issue 13, September 2005, Pages 1677-1689, Kristina Ek ; 2. the distinction between mere quantity instruments and tradable certificates shall be more apparent in the table, even if RECs are kept under the category of green purchasing. Only RECs do achieve IN THEORY what FIT are supposed to also achieve (of course within there geographical area of implementation , i.e. equalling marginal cost of production. "	in 11.5
NADAI (CIRED)	11	11	-	11	-	-	-	-	"Do we really put ""premium"" under the category of ""fixed tarifs""? 1.The shift from fixed taruff to premium has had important impact on the dynalic of wind power in some countries such as Denmark (see for instance elements of tis in : Bernd M☐ller (In Press) Spatial analyses of emerging and fading wind energy landscapes inDenmark Land Use Policy, Volume 26, Issue 3, July, Pages 233-241); 2. didn't the ElectraPreussen case happne when the German government decided to dsiconnect the wind power tariffs form market prices? "	Accepted
NADAI (CIRED)	11	11	-	11	-	AND 11.5	-	-	"1. What abt green labelling. Also not discussed in 11.5.2.. A paper can be quoted : Public and private attitudes towards 'green☐ electricity: the case of Swedish wind power, Energy Policy, Volume 33, Issue 13, September 2005, Pages 1677-1689, Kristina Ek ; 2. the distinction between mere quantity instruments and tradable certificates shall be more apparent in the table, even if RECs are kept under the category of green purchasing. Only RECs do achieve IN THEORY what FIT are supposed to also achieve (of course within there geographical area of implementation , i.e. equalling marginal cost of production. "	Accepted
Klessmann (Ecofys Germany)	11	11	-	-	-	-	-	1	"""Hot water/heating policies"" does not describe a specific type of instrument; replace by a more specific term (= mandates / RES-H use obligations ?) "	Accepted
Tagashira (Central Research Institute of Electric Power Industry)	11	11	-	-	-	-	-	1	"Definition of ""green heat purchasing"" or ""green energy purchasing"" may be required in Table 1."	Accepted
Muoz (Pardee Center, Boston University)	11	11	-	-	-	-	-	1	"Definition of feed-in tariff, misses the ""feed-in"" component, that is access to the grid. Without the ""feed-in"" component, feed-in tariffs are not feed-in tariffs, but fixed tariffs."	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Dunn (GE Energy)	11	11	-	-	-	-	-	1	"Energy production tax credits are mentioned twice in this table (4th and 9th); suggest 9th only."	Accepted
Kyte (E.ON AG)	11	11	-	-	-	-	-	1	"Table is unclear of structure. Important overview of policy mechanisms but a further order would be desirable. Why does the last mechanism have a line above it? "	Accepted
Nilsson (Lund University)	11	11	-	-	-	-	-	1	I miss att pention to olicies concerning rules of access, back-up requirements, TPA, permit procedures, building regulations, free parking and congestions charges for green cars, resource mapping, RD&D policies, certification schemes, etc etc that are all important for deployment.	in 11.5 and 11.6
Praessler (PIK)	11	11	-	-	-	-	-	1	Move below after intro text of 11.2. otherwise comes surprising here	will consider moving
Mu&#65533;oz (Pardee Center, Boston University)	11	11	-	-	-	-	-	1	remove line at the bottom	NOT CLEAR WHAT IS BEING REQUESTED
Garcia (Renewable Energy Center)	11	11	-	-	-	-	-	1	there is no substantial difference between the fourth policy (Energy production payments/production tax credits) and the ninth (Production tax credit). In fact, the explanations are almost the same.	WILL SEPARATE TO: TAX CREDITS AND PRODUCTION PAYMENTS
Londo (Energy research Centre of the Netherlands)	11	11	1	11	5	11.1.4	-	1	The line title 'hot water/heating policies' seems a bit an exeption in the list, as it does not refer to a specific instrument. Given the corresponding description, something like 'renewable standard in construction' might be more appropriate. Or may be it just refers to obligations or investment subsidies, and the entire line can be deleted.	Accepted
Londo (Energy research Centre of the Netherlands)	11	11	1	12	5	11.1.4	-	1, 2	Please check whether the two tables both cover all mechanisms mentioned.	Accepted
Philibert (International Energy Agecy)	11	11	-	-	-	-	-	11.1	Net metering' (mentioned in Table 11.1 (page 11)) should be included under 'Regulatory' category, where it is applied to 'Electricity'.	Accepted
NADAI (CIRED)	11	12	-	12	-	-	-	-	"TITLE: should be ""Existing Policy □.3"	will consider this change
Paredes (Inter-American Development Bank)	11	12	-	-	-	-	-	11.2	The table is named Table 2 and not Table 11.2	Accepted
Tagashira (Central Research Institute of Electric Power Industry)	11	12	-	-	-	-	-	2	"Issue of renewable heat certificates started in Japan. Hence, I recommend to replace ""Green power purchasing "" with ""Green energy purchasing"" and to add ""X"" to the Heating/Cooling category in Table 2."	Accepted
Nilsson (Lund University)	11	12	-	-	-	-	-	2	Again, a relatively narrow set of policies revolving around targetted RES-electricity and biofuels policy and not the range of other enabling conditions that policy should create	Accepted
Klessmann (Ecofys Germany)	11	12	-	-	-	-	-	2	How can priority access to network/market be applied in the transport sector?	Accepted
Klessmann (Ecofys Germany)	11	12	-	-	-	-	-	2	I would not consider low carbon standards a specific RE policy instrument	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hongo (Japan Bank for International Cooperation)	11	12	-	-	-	11.1.4	-	2	Gov Finance: In addition to ☐Loan guarantee☐, Public finance in the form of co-financing with commercial finance is a useful tool for mobilizing commercial finance and stabilizes the projects.. Commercial financial institutions may be easier to go these projects if they are with public institutions. It is better to add its role like ☐Loan Guarantee/Public Private Finance (Co-finance)☐	Accepted
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	13	-	21	-	-	-	-	"Section 11.2 affects as slightly messy or ad-hoc. Expenditure in R&D, demonstration and regular capacity build-up should be distinguished more clearly."	will be revised and folded into another section
Langniss (Fichtner KG)	11	13	30	-	-	-	-	-	"There certaintly exist also some younger refernces, particular importnat since they should demonstrate a ""recent"" development"	Accepted
Kessels (International Energy Agency Clean Coal Centre)	11	13	7	13	13	-	-	-	Delete	unsubstantiated
Klessmann (Ecofys Germany)	11	13	30	-	31	-	-	-	there should be newer sources than 2002	Accepted
Nilsson (Lund University)	11	13	1	-	-	11.2	-	-	"Thechapter moves rapidly into FIT and Quota. Would it not be good to set the scene and describe the broader RES governance and policy landscape (i.e., different energy carriers, different sectors, need of ""flanking policies"" to govern land-use and deal with effects of biofuels policy)?"	Accepted
Nilsson (Lund University)	11	13	1	-	-	11.2	-	-	Distingiush between policies and policy instruments?	Accepted
Nilsson (Lund University)	11	13	1	-	-	11.2	-	-	Passive house and building regulation is important also for deployment of RES (e.g., solar heating passive/active). District heating systems facilitate use of RES through bioenergy, waste and geothermal	Accepted
Sugiyama (CRIEPI)	11	13	1	-	-	11.2 AND 11.5 ?	-	-	Govenmental R&D support do not always succeed. The key question here is what are the appropriate ways and levels for individual renewable technologies.	11,5
Sugiyama (CRIEPI)	11	13	-	-	-	11.2 AND 11.5 ?	-	-	Govenmental R&D support do not always succeed. The key question here is what are the appropriate ways and levels for individual renewable technologies.	Important point
Nilsson (Lund University)	11	13	14	-	-	11.2.1	-	-	"Relies heavily here and elsewhere on REN21 which is not ""peer review"" in a classic sense. Perhaps explain what REN21 is?"	Accepted
Pokharel (SNV Netherlands Development Organisation, Nepal)	11	13	14	-	-	11.2.1	-	-	information on rural energy/renewable eenrgy policies targeted for decentralised small scale initiatives in developing and poor countries need to be inserted	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Mu&#65533;oz (Pardee Center, Boston University)	11	14	6	14	7	-	-	-	"remove sentence ""the most common electricity policiy to date has been FIT"", or at least ""to date"". While REn21 keeps track of number of countries enacting what, many changed from quota to feed-in. Unless the total number of countries who ever had quotas and feed-ins has been integrated, the sentence is technically not correct. if this has been counted, it probably needs to cite the for REN21 reports and some older sources."	will consider as we revise
Heinrich (Instituto Meteorologico Nacional)	11	14	-	-	-	-	11.2. 1.3	-	Title of figure is repeated inside graph and in figure explanation.	will sort out
SCOWCROFT (EURELECTRIC)	11	14	-	-	-	-	3	-	Need to find references that include all hydropower	will consider as we revise and do to extent possible
Fulton (Deutsche Bank)	11	15	13	-	-	-	-	-	"In the US, RPS programs have been driving force for renewable uptake. Source: DBCCA, ""Paying for Renewable Energy - TLC at the Right price,"" December 2009, see page 51 (www.dbcca.com/research). (This shows renewables possibly supplying 9% of US electricity supply by 2020). See SRREN_Draft0_Review_Fulton_Mark_Material_06.pdf"	Will discuss/describe in 11.5
Fulton (Deutsche Bank)	11	15	10	-	-	-	-	-	"RPS quotas have had mixed success; there should be a discussion of why the policy is less effective than Feed-in Tariffs because of the lack of transparency, longevity and certainty. Source: DBCCA, ""Paying for Renewable Energy - TLC at the Right price,"" December 2009, see page 51 (www.dbcca.com/research). (This has a discussion of some of the policy short comings of RPS programs). See SRREN_Draft0_Review_Fulton_Mark_Material_06.pdf"	Will discuss/describe in 11.5
NADAI (CIRED)	11	15	-	15	-	-	-	-	FIG 4: the figue shiws a stonger increase of RPS quotas at the state provincial level rather than at the national level. has this be commented upon in the literature ? If yes, it would be worth it to state it here.	Will discuss/describe
Soliano Pereira (Universidade Salvador - UNIFACS)	11	15	25	-	-	-	-	-	Include the case of Adu Dhabi.	in plan only
Klessmann (Ecofys Germany)	11	15	19	-	-	-	-	-	Not all MS have established individual targets themselves. National targets were assigned by the EU to reach overall 20% target.	text will be revised
Heinrich (Instituto Meteorologico Nacional)	11	15	-	-	-	-	11.2. 1.4	-	Title of figure is repeated inside graph and in figure explanation.	will sort out
Praessler (PIK)	11	15	-	-	-	-	11.4	-	Would leave out, limited value add and professionalism	will consider as we revise
Mu&#65533;oz (Pardee Center, Boston University)	11	15	-	-	-	-	4	-	figure not very clear, and probably innecessary.	will be given deep thought
Mu&#65533;oz (Pardee Center, Boston University)	11	15	-	-	-	-	4	-	If left in the report, move to section 11.5.2.1.3	will be reviewed
SCOWCROFT (EURELECTRIC)	11	15	-	-	-	-	4	-	Need to find references that include all hydropower	will be reviewed
Mu&#65533;oz (Pardee Center, Boston University)	11	15	-	-	-	-	4	-	There're only 16 points, if left in the report, probably better presented in a table.	will be reviewed

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Soliano Pereira (Universidade Salvador - UNIFACS)	11	16	15	16	16	-	-	-	"Include a phrase on hydropower: China, Brazil, Canada, United States, Russia, Norway and India respond for 61% of world power based on hydropower (IEA, 2009, Key World Energy Statistics). Instead of saying ""A handful of countries lead in the production and use of biofuels"", say: Unitated States and Brazil are responsible by 91% of world ethanol production and Europe responds for two thirds of world production, with Germany, France, Italy and Spain being top EU producers (REN21, 2009a)."	More comments on hydropower. Section revision needed
Mu&#65533;oz (Pardee Center, Boston University)	11	16	43	-	-	-	-	-	"need to mention ""other"" more obscure RE techs, if not by name, at least acknowledging they exist. Maybe saying ""Ocean energy and other RE sources"" &#65533;"	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	16	42	16	43	-	-	-	"The sentence beginning with ""The proportion spent□"" does not read clearly to me, particularly the second half of the sentence - It seems like something might be missing."	section will be revised
Mu&#65533;oz (Pardee Center, Boston University)	11	16	43	-	-	-	-	-	"word ""Cinderella"" culturally dependent and not easily tranlatable to all IPCC languages, change for regular wording"	will omit
Devernay (Electricity of France - EDF Hydro Engineering Centre)	11	16	12	16	15	-	-	-	As hydropower accounts for the largest part of worldwide electricity generation by renewable sources, it is necessary to include (and not exclude) large hydropower in the figures, in order to give an accurate picture of the real contribution of the various countries in the world renewable mrket. Omitting large hydropower introduces a significant bias.	will work to revise text to include hydropower statistics
Kessels (International Energy Agency Clean Coal Centre)	11	16	29	16	40	-	-	-	Do not need to cover individual countries and why they spend R&D money the first paragraph gives a clear indication of the trend is downwards unless a country has natural resources to utilise.	country-specific info. will probably be omitted
NADAI (CIRED)	11	16	43	17	2	-	-	-	I s the comparison between marine and hydro relevant, given that one is a mature tech and the other an emergent one.	will consider as revise and shorten section
Mu&#65533;oz (Pardee Center, Boston University)	11	16	6	16	8	-	-	-	update data with new GWEC	will consider as we revise
NADAI (CIRED)	11	16	-	16	-	11.2.2	-	-	"This section parallels fig 1. it woudl be good then to be bale to follow the parallel, and point explicitly at the roel of ""grants"" and ""business angels"" (definition to provide), whihc are mentioned in fig 1 for the early stage of R&D"	And substantive edit.
Pokharel (SNV Netherlands Development Organisation, Nepal)	11	16	19	-	-	11.2.2	-	-	Government/public sector spending on subsidy/promotion is missing	will include if data are available
Philibert (International Energy Agecy)	11	16	19	-	-	11.2.2	-	-	The message should be clearly stated that private sector RD&D spending on renewables needs to be significantly scaled-up relative to government/public RD&D spending, especially demonstration and market replication efforts.	will do so if we find literature, but who is going to pay for this?
Praessler (PIK)	11	16	20	-	-	11.2.2.1	-	-	"Many of the numbers given here (hist. Gov. R&D spending; spending per technology) would be best presented as a chart rather than text"	This section is being streamlined so comment may no longer be relevent.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Nilsson (Lund University)	11	16	20	-	-	11.2. 2.1	-	-	Say something about need for R&D. R&D is relatively inexpensive but more money is needed when going to Demonstrations, and niche markets to start working on the learning curve and move across the valley of death.	R&D data are included in 11.2, and discussion of R&D policies and lessons learned in 11.5
McCormick (International Union for Conservation of Nature (IUCN))	11	17	5	-	-	-	-	-	" This sentence seems like it should read ""..spending patterns FOR or DURING the years.."" rather than ""spending patterns the years"""	will address if relevant sentence remains
McCormick (International Union for Conservation of Nature (IUCN))	11	17	17	17	18	-	-	-	"The sentence beginning with ""Only 12"" does not read clearly. Should it say ""are handled"" instead of ""and handled""?"	much of this will be omitted
NADAI (CIRED)	11	17	5	-	14	-	-	-	a small table might help the reader.	will consider table if relevant data remain
Haum (German Advisory Council on Global Change)	11	17	5	17	14	-	-	-	Introductory argument (climate change hits headlines) for selection of R&D spending period weak as not substantiated. Suggest another argument (most recent figures, etc.).	much of this will be omitted
Kessels (International Energy Agency Clean Coal Centre)	11	17	12	17	12	-	-	-	Roughly speaking?? Language, Perhaps it would be better to say According to estimates with references	will address if relevant sentence remains
NADAI (CIRED)	11	17	23	-	27	-	-	-	same remark, a small table might help the reader.	will consider if keep data
NADAI (CIRED)	11	17	5	-	-	-	-	-	sentence not clear. A word seems to miss.	will check as section is rewritten
Langniss (Fichtner KG)	11	17	15	17	22	-	-	-	This paragraph is only on Europe and does not add any qualitatively new information to that what is said in the previous paragraph. Delete for purpose of shortening the whole chapter	much of this will be omitted
Mu&#xFFFD;oz (Pardee Center, Boston University)	11	17	23	17	30	-	-	-	Would be useful to add the famous curve of energy RD from the 70's to now. Unnecessary references to nuclear and FF, remove.	Nemet, G. F. and D. M. Kammen (2007). "U.S. energy research and development: Declining investment, increasing need, and the feasibility of expansion." *Energy Policy* 35(1): 746-755.
Praessler (PIK)	11	17	31	-	-	11.2. 2.2	-	-	"A total of private R&D spending would be informative; esp. in comparision to gov spending. The % given are of limited value"	will do if possible
Nilsson (Lund University)	11	17	31	-	-	11.2. 2.2	-	-	Please be clear that (1) 0.6 percent for energy sector is NOT RES-R&D spending and (2) even when/if they report RES-spending in companies many of us what not call it R&D but rather O&M (if I am cruel).	Accepted
Pokharel (SNV Netherlands Development Organisation, Nepal)	11	17	31	-	-	11.2. 2.2	-	-	Users contribution in RET especially in developing countries is missing	will be added
Sonntag-O'Brien (REN21)	11	18	3	-	-	-	-	-	change $116 billion to $117 billion	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	18	-	-	-	11.2.3	-	-	"1. This section will require updated with the new New Energy Finance figures that include 2009, and the UNEP Global Trends report will be out mid-2010 which will provide a strong reference for keeping the SR current. Somehow this opening part doesn't convey the very significant change that has occurred in this sector since 2004, the scale of financing or the consequences of todays asset financing for RE in the energy mix. Consider including the New Energy FInance (or UNEP Global Trends) graph of overall investment since 2002; perhaps include wind and solar specifically. Its not about presenting a 'good news' story but within the finance sector interest in investing in the sector is very signficant - and this is only just filtering through to literature. Analysts reports (eg DB, Sarasin), aggregated sector statistics and analysis from New Energy Finance (e.g. institutional investors survey at start 2009) and NEF's work with UNEP on Global Trends; work by UNEP's Sustainable Energyy Finance Initiative (including on the financial crisis); as well as my own evidence-based work with financiers clearly reflect a very strong sense of market growth within the sub-sectors (technologies). It may be relevant to ask New Energy Finance/UNEP to do a analysis of sub-sector investment & supply chain issues from 2005-end 2009, as this five year period conveys the dynamism in the sector. "	Needs revision
Hamilton (Chatham House)	11	18	18	18	19	11.2.3	-	-	"The asset financing numbers are perhaps the most important numbers for indicating overall volume of RE in the energy mix in the near term. UNEP Global Trends in Sustainable Energy Investment 2009 indicates that: ""In 2008, the new 40GW of renewable energy plants accounted for 25% of new nameplate capacity Combined with approximately 25GW of new large hydropower stations, renewable energy overall represented 41% of total new global capacity. 2008 was the first year that investment in new power generation capacity sourced from renewable energy technologies (approximately $140 billion including large hydro) was more than the investment in fossil-fueled technologies (approximately $110 billion). Given the long life of power sector assets, however, it will be some time before renewable energy dominates the generation mix."" (p11)"	Needs revision
Philibert (International Energy Agecy)	11	18	-	-	-	11.2.3	-	-	Discussion should be included on individual renewable energy technology & regional investment trends. Please Include reference to relative importance of carbon finance for renewable energy diffusion in important emerging economies, e.g. China, Brazil. And Current investment trends should be contrasted with investment needs (as projected based on the scenarios discussed in Chapter 10)./	Accepted
Praessler (PIK)	11	18	1	-	-	11.2.3	-	-	Interesting numbers, but all based on one source (New Energy Finance). Is there any other source out there to second these numbers?	will work to find more sources or explain reason for use of NEF/UNEP data
Philibert (International Energy Agecy)	11	18	-	-	-	-	5	-	Data needs to be updated with 2009 figures (available from New Energy Finance)	will do if possible
SCOWCROFT (EURELECTRIC)	11	18	-	-	-	-	5	-	Need to find references that include all hydropower	will do if possible

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Devernay (Electricity of France - EDF Hydro Engineering Centre)	11	18	-	-	-	-	5	-	Omitting large hydropower from the graph gives a wrong picture of the reality. For instance, approximately 38 GW of new hydropower were put in operation in 2008 corresponding to an investment of more than 40 billions of USD.	will address if available data
NADAI (CIRED)	11	19	-	-	19	-	-	-	"Table 3: very clear table, it was be good to have key words at the beginign of each parag. In bold (capital, equity, finance, debts, bonds; mergers and acquisitions ☐.) as these are the key categories that we need to master to understand the issues. "	Accepted
Kessels (International Energy Agency Clean Coal Centre)	11	19	9	20	8	-	-	-	It would help to have a comparison with other R&D such as fossil fuels or nuclear, energy efficiency. Also do venture captialists prefer a particular technology and what are the returns on their investments, is their literature on this?	will address if literature can be identified
Heinrich (Instituto Meteorologico Nacional)	11	19	9	-	-	-	-	-	Sentence fragment.	Accepted
Sawyer (Global Wind Energy Council)	11	19	3	-	-	11.2.3.1	-	-	"Is the the ""technology development and commercialization"" only financed by ""venture Capital"", should other possible financial options also be listed?"	will work to address
Nilsson (Lund University)	11	19	3	-	-	11.2.3.1	-	-	Is what Moore and Wustenhagen said in 2004 about venture capital still true? I thought there was a rush to RES and cleantech in many countries, and at least clearly so in California (and before crisis).	Accepted
Londo (Energy research Centre of the Netherlands)	11	19	9	19	9	11.2.3.1	-	-	Sentence fragment (probably lost something)	Accepted
Hongo (Japan Bank for International Cooperation)	11	19	-	-	-	11.2.1	-	3	For projects construction, I think now carbon finance is recognized as a great contribution, particularly small hydro power, and wind power and bio mass power generation in developing countries. Carbon finance improves projects economics.	CDM finance will be added to this section
Hongo (Japan Bank for International Cooperation)	11	19	-	-	-	11.2.3.1	-	3	On this draft it is introduced that PPA is used for RE and it would be in normal. But actually project finance for RE projects was provided to projects under Feed-in-Tariff and only limited case but mandatory purchase of RE without fix price.	Accepted
Mu�oz (Pardee Center, Boston University)	11	20	21	-	-	-	-	-	"instead of ""the"" first major supply glut should be ""a"" major supply glut. There have been gluts in the past."	likely to change with editing
Fulton (Deutsche Bank)	11	20	34	-	-	-	-	-	"Should emphasize that project finance investment is the largest component of total renewable energy capital flows and further scale up will require large flows of private sector investment in infrastructure. Source: DBCCA, ""Investing in Climate Change 2010: A Strategic Asset Allocation Perspective,"" January 2010, see pages 81-85 (www.dbcca.com/research). See SRREN_Draft0_Review_Fulton_Mark_Material_04.pdf"	will become clear
Kessels (International Energy Agency Clean Coal Centre)	11	20	-	20	-	-	-	-	A lot of reliance on New Energy Finance references is this in the public domain or is it grey literature?	this is grey literature but is the only source of such information.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kessels (International Energy Agency Clean Coal Centre)	11	20	23	20	26	-	-	-	This is a good comment but should it be in this section it seems to reflect the entire investment in RE and for that matter other industries	the comment refers specifically to equipment mfc, and therefore does not reflect the entire industry.
Pokharel (SNV Netherlands Development Organisation, Nepal)	11	20	9	-	-	11.2.3.2	-	-	Development of SMEs in developing countries need to be included	Accepted
SCOWCROFT (EURELECTRIC)	11	20	9	-	-	11.2.3.2.	-	-	This analysis is incomplete and not very relevant going forward - can be deleted	will consider
Sonntag-O'Brien (REN21)	11	21	2	-	-	-	-	-	"""Reference missing"" - this observation stems from UNEP/NEF 2008"	Accepted
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	21	42	21	42	-	-	-	"as regards the driver 'access to energy': make better distinction between (physical) availability and affordability; this is also related to how areas/countries get wealthier and networks evolve (optimality shifts) "	will add a term access to affordable energy services
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	21	25	22	5	-	-	-	"There are other drivers and the discussion fo drivers merits to represent more diverse reasons than just 'positive' ones. For example agriculture support systems are realigned to pass as renewable energy support "	We will add a sentence that RE are sometimes used to achieve goals from other policy areas e.g. agriculture so RE deployment is not in the focus at all but a side benefit
Kessels (International Energy Agency Clean Coal Centre)	11	21	25	21	34	-	-	-	Can delete this paragraph as it is covered in the next paragraph and bullet points	This paragraph is needed to set the scene.
Christophersen (Climate and Pollution Agency)	11	21	1	35	35	-	-	-	ch 11.3 or 11.4 should better explain that in many countries there are still subsidies (on fossils etc) that is an important driver against transition to RE and also act as a barrier. This point is somewhat hidden in 20-22 at page 29, while subsidies on RE is given much more space in the text.	will address in 11.4.
Tagashira (Central Research Institute of Electric Power Industry)	11	21	39	-	-	-	-	-	Golemberg,2004 is not listed in the reference list.	reference will be included
Mu&#65533;oz (Pardee Center, Boston University)	11	21	25	21	39	-	-	-	If need to save space, these two paragraphs can be deleted.	These paragraphs are needed to set the scene.
Christophersen (Climate and Pollution Agency)	11	21	1	26	20	-	-	-	Should the text also address the drivers from the coal and petroleum sectors and the car industry (marketing etc.) which may act to protect existing technologies, structures and energy sources?	This doesn't belong in section on drivers FOR RE.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Mu□oz (Pardee Center, Boston University)	11	21	41	22	5	-	-	-	the order of the drivers is not clear. There is no such thing as random order, so the list should clarify under what criteria they are orderd (importance, alphabetical, etc) and if it is in no order, then say so explicitly.	we will add a sentence explaining that from the point of view of how many population is concerned access to energy is more important put from the point of view for what purpose most of the RE has been implemented recently GHG mitigation was the dominant motivation
Nilsson (Lund University)	11	21	24	-	-	11.3	-	-	Do RES have any drawbacks at all? (says devil□s advocate :-))	Characteristics of RE needs to be considered in Technology Chapters and Chapter 9
Paredes (Inter-American Development Bank)	11	21	24	-	-	11.3	-	-	Important to make reference to the studies commissioned in Spain by Asociaci□mpresarial E□a (AEE) on the macroeconomic impacts of wind energy and by Asociaci□e Productores de Energ□Renovables (APPA) on the macroeconomic impacts of renewable energy. Both studies quantify the net benefit of their impelemnattion in terms of GDP share, energy security, decrease of electricty wholesale price and job creation, among others.	This is only grey literature. Peer-reviewed literature exists on this subject.
Mu□oz (Pardee Center, Boston University)	11	21	24	-	-	11.3	-	-	Is missing the driver of industrial development (a strategic decision to promote national industry for exports of technology, as in the case of German). Could be construed as economic development, but is not reflected so in the text.	Will add a sentence on page 24 ff on this particular aspect of economic development
Nilsson (Lund University)	11	21	24	-	-	11.3	-	-	The whole section 11.3 can be shorter. It is mainly (and too one-sided and unreflected) an argument for how great RES are. Risk of overlap with introductory report chapter?	Incorporate a phrase explaining the approach of this section as a rfelction of what drives policy makers to consider RE. This is irrespective whether the motivation is based on facts or not!
de Haan (Ernst Basler + Partner AG)	11	21	24	-	-	3	-	-	"Not all RE technologies are automatically beneficial for climate change - two examples being land use changes (e.g. rain forest deforestation for increased agricultural areas) and N2O emissions due to denitrification of fertilizer used for agro-fuel. Therefore, there might be goal conflicts between policies promoting RE and climate change mitigation policies. ""Climate change mitigation"" is thus not automatically a driver for RE policies, and vice versa."	We will mention that potential conflicts of targets exists.
Haum (German Advisory Council on Global Change)	11	22	38	22	38	-	-	-	"""any size"" seems exagerrated suggestion better: size can be constructed in relation to demand"	Accepted
Mu□oz (Pardee Center, Boston University)	11	22	11	22	24	-	-	-	"after ""many countries"" the res till 11.3.2 can be deleted if we need to save space"	The final draft of the SRREN will be processed by a professional copy-editor. All editorial comments such as this will be resolved at that time.
Soliano Pereira (Universidade Salvador - UNIFACS)	11	22	30	-	-	-	-	-	"Include ""access to leisure and information (TV)"""	Accepted
Garcia (Renewable Energy Center)	11	22	1	22	3	-	-	-	"May I suggest to add in the first bullet ""independence"" (Improve security and independence of energy supply and use."	description of dimensions of security of supply will be supplemented with this aspect
Mu□oz (Pardee Center, Boston University)	11	22	41	23	1	-	-	-	"sentence beginning with ""Because"" questionable. I would delete it. If you want to keep it, i would change the order of the sentence and insted of ""beacuse"" say ""one of the causes. Also, one of the reasons is the logistics, and avoiding the problems of shipping fuel to remote locations. "	has changed with editing

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Mu&#65533;oz (Pardee Center, Boston University)	11	22	26	-	-	-	-	-	"Sould read: ""Universal access to energy is a driver&#65533;."" (delete This section explores the goal of) and ""as"""	Accepted
Mu&#65533;oz (Pardee Center, Boston University)	11	22	35	22	37	-	-	-	"the sentence after ""health"" belongs to 11.3.4"	This is to illustrate some benefits of access to modern energy
Mu&#65533;oz (Pardee Center, Boston University)	11	22	34	25	35	-	-	-	"The sentence from ""Acess"" to ""health"" belongs to 11.3.5"	will be reallocated
Langniss (Fichtner KG)	11	22	18	-	-	-	-	-	Delete first phrase of the citation since this is about energy efficiency, whereas the citation shall verify the shift of developing countries towards RE. Possibly it would be even a better example to mention that India has an own ministry for RE	Accepted
Haum (German Advisory Council on Global Change)	11	22	18	22	21	-	-	-	Quote of Dr. Singh does not express relation of planned activities to climate change mitigation. Delete or find another quote	will look for another quote
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	22	25	23	21	-	-	-	see previous comment	will add a term access to affordable energy services
Mu&#65533;oz (Pardee Center, Boston University)	11	22	4	22	5	-	-	-	should just be one more bullet point	We do not understand this comment
Haum (German Advisory Council on Global Change)	11	22	41	22	41	-	-	-	Spcific Modularity needs better explanation. Brown energy may also be adapted to increasing demand	accept need for clarity
Haum (German Advisory Council on Global Change)	11	22	34	22	37	-	-	-	Statement is too deterministic. Clean energy does not automaticaly improve education, communication and income generation. May support or contributes under certain other conditions aslo fullfilled.	will be changed into "may contribute" or similar
Hongo (Japan Bank for International Cooperation)	11	22	2	22	3	11.3	-	-	Regarding ☐environment merits and health merits☐ RE has both positive and negative side. For instance sometime RE projects are argued by green parties, like bird strike for wind power projects and development of geothermal or wind power projects at sensitive area like national park. This means both pros and cons from environment point of views are there and many projects are started by mitigating these negative impacts.	We will mention that potential conflicts of targets exists and RE may also have backsides. In our introduction we will explain our approach i.e. the examples of benifits are only to illustrate on what the motivations of policy makers are based upon..
Kessels (International Energy Agency Clean Coal Centre)	11	22	6	22	24	11.3.1	-	-	Could delete this section as its already covered numerous times in other chapters	It is mentioned here to illustrate the motivation of policy makers not for the scale of poltential etc.
Heinrich (Instituto Meteorologico Nacional)	11	22	6	-	-	11.3.1	-	-	Should include references to the United Nations Framework Concention on Climate Change's LCA track and its mitigation (including mitigation by developing Parties), financing and technology transfer ongoing negotiations.	We do not understand this comment
Praessler (PIK)	11	22	6	-	-	11.3.1	-	-	Some holistic, global numbers would be good here. Section seems a bit random with small-scall, opportunistic examples like RE strategy in Chicago have potential for shortening the text.	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Sawyer (Global Wind Energy Council)	11	22	6	-	-	11.3.1	-	-	This section should cover the RE mitigation potential,which could come after line 24. According to Global Wind Energy Council(2008), wind energy would achieve an annual CO2 savings of more than 1.5 billion tons in 2020 and 3.2 billon tons in 2030. Ref: Global Wind Energy Council,2008: Global wind energy outlook 2008, Brussels, Belgium.http://www.gwec.net/index.php?id=92	no peer reviewed literature. Aspect should be dealt with in Chapter 9
Nilsson (Lund University)	11	22	6	-	-	11.3.1	-	-	Why qoute Singh instead of, perhaps, noting GHG emission problems from RES?	It is mentioned here to illustrate the motivation of policy makers not for the scale of poltential etc.
NADAI (CIRED)	11	23	16	23	21	-	-	-	"but the potential impact of RE policy on energy poverty in a country wuh as the UK is discussed, cf Decentralised systems and fuel poverty: Are there any links or risks? Energy Policy, Volume 36, Issue 12, December 2008, Pages 4514-4517 Gordon Walker"	Accepted
Mu&#65533;oz (Pardee Center, Boston University)	11	23	23	23	25	-	-	-	"I would simplify to ""There are many definitions of energy security"""	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	23	11	-	-	-	-	-	"Include Brazil. Reference: Renewable energy as a tool to assure continuity of a low emission Brazilian electric power sector ☐ Results of an aggressive renewable energy policy Pereira, O.L.S. Power & Energy Society General Meeting, 2009. PES apos;09. IEEE. Volume , Issue , 26-30 July 2009 Page(s):1 - 7. Digital Object Identifier 10.1109/PES.2009.5275348"	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	23	2	-	-	-	-	-	"Include in the text: On top of that, users reduce their energy expenditures as they migrate to solar home systems, as compared with their previous expenses with fossil fuels. In certain cases, when supplied by utilities, they can have access to social tariffs similar to those appplied to grid connected consumers, making them better-off. References: PEREIRA, O. et al: ""PV Comes to the Mainstream: 30.000 SHS Installed by Utility in Brazil under a New Distribution Planning Model. In: 21st European Photovoltaic Solar Energy Conference, 2006, Dresden. Proceedings of the International Conference held in Dresden, Germany 4-8September 2006, 2006. p. 2927-2932. Energy Sector Management Assistance Program (ESMAP), 2005: Brazil Background Study for a National Rural Electrification Strategy: Aiming for Universal Access."	Accepted
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	23	23	24	38	-	-	-	"security of supply arguments are also used to cloak protectionism; "	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	23	23	24	38	-	-	-	"there is a rising number of security of supply studies, regarding criteria and indicator systems, economic costs and benefits; and geopolitics; this merits mentioning"	we will contact reviewer for suggestions
Kessels (International Energy Agency Clean Coal Centre)	11	23	1	21	23	-	-	-	Does not discuss the limitations of RE as well no water no hydro, no wind and skill shortage needs to be balanced and as TSU points out references are missing	Accepted
SCOWCROFT (EURELECTRIC)	11	23	4	-	21	-	-	-	EU RES policies can be included	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	23	15	-	-	-	-	-	Include Mozambique: Reference: Fundo de Energia - FUNAE, 2007: Strategic Plan Summary (2008-2010). It camn be downloaded from: http://www.funae.co.mz/lib/pdf/Strategic%20plan.pdf	Will do so if we find literature
Kessels (International Energy Agency Clean Coal Centre)	11	23	23	23	39	-	-	-	Rewrite, delete the bullet points and just use a definition from the literature, eg IEA	has been rewritten
Sawyer (Global Wind Energy Council)	11	23	11	-	-	11.3.2	-	-	"Reference for China: (National People Congress, 2005) ; National People Congress (NPC), 2005: Chinese Renewable Energy Law: Beijing. "	Accepted
Nilsson (Lund University)	11	23	22	-	-	11.3.3	-	-	Are RES problem free from a security of supply perspective? Can RES cause other problems (i.e., food security)? Is the biofuels debate covered in the Bioenergy chapter? This issue must be dealt with in this chapter?	we will mention this problem here, but a fully fledged debate should be conducted in Chapter 9
Klessmann (Ecofys Germany)	11	23	22	-	-	11.3.3	-	-	The first sentence sounds very arbitrary. The definition of energy security is quite clear, there are just many parameters that influence energy security.	Rejected - there are many definitions of energy security, often very different. We try to include the various dimensions that energy security usually covers.
Klessmann (Ecofys Germany)	11	23	22	-	-	11.3.3	-	-	This section should reflect some of the European literature on energy security	we will contact reviewer for suggestions
Paredes (Inter-American Development Bank)	11	23	22	-	-	11.3.3.	-	-	The excellent work by Shimon Awerbuch should be mentioned here, which showed that portfolio diversification and optimization through Renewable Energy could enhance energy security, minimize risk and reduce overall generation cost in a traditional fossil-fuel based system. See for example: Analytical Methods for Energy Diversity & Security, edited by Morgan Bazilian and Fabien Roques, Elsevier, 2008.	Accepted
Mu&#65533;oz (Pardee Center, Boston University)	11	24	21	24	27	-	-	-	can be deleted if text needs to be cut	Accepted
Mu&#65533;oz (Pardee Center, Boston University)	11	24	28	24	34	-	-	-	I would move this to the new subsection I propose in comment 36 above.	We will think about this
Praessler (PIK)	11	24	35	24	38	-	-	-	Potential to cut	The final draft of the SRREN will be processed by a professional copy-editor. All editorial comments such as this will be resolved at that time.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Rosinski (Electric Power Research Institute)	11	24	1	24	3	-	-	-	Provide clarification how RE power plants would provide a more robust grid. Many would dispute this point.	will check Chapter 8
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	24	40	24	40	-	-	-	report of Goldemberg (no reference)	Accepted
Rosinski (Electric Power Research Institute)	11	24	8	24	11	-	-	-	RE's role in diversifying energy supply portfolios is appopriate, but contradicts statements elsewhere that RE be the standard energy source.	will describe that RE represents a whole range of digfferent technologies and tapping different resources. Plus often domestic ressource
Kessels (International Energy Agency Clean Coal Centre)	11	24	1	24	38	-	-	-	This section does not cover the limitations of RE and should be more balanced, could also delete a couple of paragraphs and just outline the advanages as well as the disadvantages to appear more balanced.	will delete definition of energy security; will better balance the propertities of RE; Full discussion of this issue should go to chapter 9
Fulton (Deutsche Bank)	11	24	39	-	-	-	-	-	This section should be expanded if possible with new data.	Characteristics of RE needs to be considered in Technology Chapters and Chapter 9
Kessels (International Energy Agency Clean Coal Centre)	11	24	40	24	40	-	-	-	where is the reference for Goldemberg	Accepted
Hamilton (Chatham House)	11	24	21	24	27	11.3.3	-	-	Could also add a reference to the Masdar initiative of United Arab Emirates (briefly noted also on page 99, line 34)	we will contact reviewer for suggestions
Dunn (GE Energy)	11	24	39	-	-	11.3.4	-	-	"As discussed in the expert review meeting, a synthesis of literature on the job impacts of RE policies would be valuable to policymakers in this chapter. The US renewable energy industry has recently commissioned a study of the jobs impact of various US National RES scenarios. See SRREN_Draft1_Review_Dunn_Seth_Material_8.pdf. The broader message from the IPCC may be that such studies are often lacking and should be part of the policy development and implementation process. But some countries, such as China, the job metric aids RE policy implementatoin (see 1/30/10 NYT article ""China Leading Race to Create Clean Energy). GE has been making the case that the US lags Europe and China in considering the jobs dimension in RE policy implementation. See page 12 of SRREN_Draft1_Review_Dunn_Seth_Material_9.pdf."	sentence on effects will be added, but full discussion should go into chapter 9
Pehnt (Institute for Energy and Environmental Research)	11	24	39	-	-	11.3.4	-	-	"In this section, many employment figures are cited. More interesting would be: why are there positive employment effects (substitution of energy by labour; more labour-intensive products; shift from fuel to investment cost; etc.) . Discuss net and gross employment effects."	sentence on effects will be added, but full discussion should go into chapter 9
Mu&#65533;oz (Pardee Center, Boston University)	11	24	39	-	-	11.3.4	-	-	I would separate into two sections: one on job creation and social development and one into economic development, including the missing industrial policies (comment 25) and trade balance.	these aspects are strongly interrelated to each other and needs to be dscribed together

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Haum (German Advisory Council on Global Change)	11	24	-	26	-	11.3.4	-	-	The paragrpah is well writen but needs to state that these are net emplomyment effects. There is no point in supressing that investing in RE will reduce employment in other energy industries. Last tp paragraphs od section could be shortened	Accepted
Mu&#65533;oz (Pardee Center, Boston University)	11	25	19	25	22	-	-	-	"cannot be supported as it stands now. Cannot say ""it is clear"" and at the same time ""there's no agreed method of calculation"" I would softer language and emphasize the point which is the need for an agreed methodology. "	language will be adapted
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	25	19	25	22	-	-	-	"Example study: For the EU SAVE programme an employment impact assessment study was carried out in 1998-2000, co-ordinated by the ACE.The study assessed micro (project) level, meso level and macro level effects and included interviews of actual implement"	we will contact reviewer for suggestions
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	25	19	25	22	-	-	-	"reference for comment no. 16: Wade J., Wilshire V., Scrase I., (2000), National and local employment of energy efficiency investment schemes, final report to the European Commission, ACE, London."	Thank you for this - we will keep this in mind as report progresses
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	25	19	25	22	-	-	-	"references for coment no.16: Jeeninga H. et al (1999), Employment Impacts of Energy Conservation Schemes in the Residential Sector; "	Accepted
Kessels (International Energy Agency Clean Coal Centre)	11	25	27	25	27	-	-	-	Define ICT?	Accepted
Nilsson (Lund University)	11	25	25	-	-	-	-	-	Is Slurry the same as Digestate?	will sort this out
Pugh (U.S. Department of Energy)	11	25	19	25	22	-	-	-	It might also be worth pointing out that higher employment in one sector versus another implies lower labor productivity. Though low labor productivity can be offset by lower capital and fuel costs, it is not in itself a strong basis for an argument about the benefits of a technology unless governments are willing to pay a subsidy for job creation.	effect will be added
McCormick (International Union for Conservation of Nature (IUCN))	11	25	24	-	-	-	-	-	It would be helpful to clarify what SNV and AEPC stand for.	Accepted
Praessler (PIK)	11	25	34	25	43	-	-	-	Potential to cut	Accepted
SCOWCROFT (EURELECTRIC)	11	25	12	-	15	-	-	-	relevance?	acknowledgement of government important
SCOWCROFT (EURELECTRIC)	11	25	34	-	43	-	-	-	relevance?	clarify as local impact

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Nilsson (Lund University)	11	25	41	25	43	-	-	-	Strange quote. Is the reference strong? Does it really show causaility between RE-Air Q and tourism?	will be rephrased
McCormick (International Union for Conservation of Nature (IUCN))	11	25	27	-	-	-	-	-	Unclear what ropeways and ICT devices are.	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	25	2	-	-	-	-	-	unclear whether an additional 280,000 jobs were created in 2008, or whether 208,000 is now the total number of jobs created by RE between 2004 and 2008.	will be reworded
Kessels (International Energy Agency Clean Coal Centre)	11	25	22	25	22	-	-	-	What does the author mean by 'so on'	will be deleted
Sawyer (Global Wind Energy Council)	11	25	29	-	-	11.3.4	-	-	"In the sentence ""Biogas systems in Shannxi Province□"", Shanxi province is misspelled, should be ""Shanxi"""	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	26	36	-	-	-	-	-	"Eliminate ""we"""	Accepted
Mu&#65533;oz (Pardee Center, Boston University)	11	26	39	-	-	-	-	-	"if need to cut words, delete ""to RE supplies that is developing"", including the footnore 4."	we will rewrite
McCormick (International Union for Conservation of Nature (IUCN))	11	26	13	-	-	-	-	-	"I'm not sure whether the authors meant to say ""will have a harmful impact"" or ""will have harmful impacts"""	Accepted
de Haan (Ernst Basler + Partner AG)	11	26	12	26	20	-	-	-	"The line of argumentation in this section is not yet fully consistent. It seems that there is a implicit assumption that all RE technologies are beneficial to biodiversity and ""sustainability"". Or there is, in this section, that RE excludes biomass use. This is however not necessarily the case. RE in the form of biomass can increase pressure on biodiversity. Therefore one cannot argue that growing awareness for harmful impact on biodiversity has led governments to increase RE deployment. Also, if biomass is considered as a form of RE, it is inconsistent to formulate that Nepalese villages deploy RE to mitigate impacts from biomass."	will mention but fully fledged discussion should go in Chapter 10
Mu&#65533;oz (Pardee Center, Boston University)	11	26	27	26	28	-	-	-	"use more neutral language, such as ""power grid regulations discriminatory against independent generators"""	text is deleted
Mu&#65533;oz (Pardee Center, Boston University)	11	26	27	-	-	-	-	-	change example. Shadowed roofs are actually good design under many climatic conditions.	we can adapt this
Kessels (International Energy Agency Clean Coal Centre)	11	26	-	26	-	-	-	-	Delete tremendously in footnote	Accepted
Heinrich (Instituto Meteorologico Nacional)	11	26	10	-	-	-	-	-	Example incomplete.	Accepted
Pugh (U.S. Department of Energy)	11	26	36	26	36	-	-	-	Please have the Ch. 1 authors draw on this discussion in their section on barriers. This treatment is much better.	will notify ch 1

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Sawyer (Global Wind Energy Council)	11	26	7	-	-	-	-	-	Reference for China: (Gan and Yu, 2008). Reference: Gan, Lin and Yu, Juan. 2007: Bioenergy transition in rural China: Policy options and co-benefits. Energy Policy, Volume 36, Issue 2, February 2008, Pages 531-540	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	26	39	-	-	-	-	-	The phrase is incomplete.	we will rewrite
Kessels (International Energy Agency Clean Coal Centre)	11	26	1	26	20	-	-	-	There are also disadvantages such as monoculture for biomass and destruction of biodiversity, needs to be a bit more balanced and also discuss benefits to the community environment from use of RE, eg landscape, soil improvement, water	will mention but fully fledged discussion should go in Chapter 9
Kessels (International Energy Agency Clean Coal Centre)	11	26	22	26	35	-	-	-	This could be deleted to save space and just start at line 36	Accepted
Christophersen (Climate and Pollution Agency)	11	26	1	26	20	-	-	-	This is a very important section with some very good points. Integration with air pollution policy is a key to RE-development in many developing countries. These points should be better covered in the summary text. Furthermore it would be helpful if you in the chapter text could explain more how RE-policy and air quality policies (and other benefiting sectors) best can be coupled.	Accepted
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	26	1	26	20	-	-	-	what about ancillary risks of renewables? Most prominent ones relate to biomass, but also hydro can have such	will contact reviewer for clarification of meaning of comment
Hongo (Japan Bank for International Cooperation)	11	26	1	26	20	11.3.5	-	-	"Many financial institutions like multilateral and bilateral institutions have Environment Guideline for their lending. In case of JBIC, JBIC guideline has 3 components, say pollution control, natural environment and social environment. Please see the web below. http://www.jbic.go.jp/en/about/environment/guideline/business/pdf/pdf_01.pdf "	will contact reviewer for clarification of meaning of comment
Mu&#65533;oz (Pardee Center, Boston University)	11	26	1	-	-	11.3.5	-	-	if we need to cut text, can delete all examples from line 7 to 11 and 16 to 20 an dmerge remainder of 2nd paragraph with first.	Accepted
Pugh (U.S. Department of Energy)	11	26	1	26	20	11.3.5	-	-	It is important to note that renewables are not entirely free of environmental impacts. In particular, unsustainable production of biofuels carries with it the potential for harm to biodiversity as well as very limited or even negative climate benefits.	will mention but fully fledged discussion should go in Chapter 9
Praessler (PIK)	11	26	1	-	-	11.3.5	-	-	Very one-sided depiction: you cld also cite studies finding that wind and esp. biomass energy use has adverse effects on biodiversity	will mention but fully fledged discussion should go in Chapter 10
Yamaguchi (The Institute of Energy Economics, Japan)	11	26	-	-	-	11.4	-	-	"IEA RETD's new study ""Renewable Energy Barriers (RENBAR)""can also be cited after its completion."	thank you

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kimura (Central Research Institute of Electric Power Industry)	11	26	-	34	-	11.4	-	-	"It is desirable to discuss the concept of ""failure of technological system"" proposed by Negro et al.(2007). They discuss the importantce of failure that is caused not by any single actor but by lack of certain system functions. See: Negro, S., 2007, Explaining the failure of the Dutch innovation system for biomass digestion: A functional analysis, Energy Policy, 35, pp.925-938. Hekkert, M., Negro, S., 2009, Functions of innovation systems as a framework to understand sustainable technological change: Empirical evidence for earlier claims, Technological Forecasting & Social Change, 76, pp.584-594."	paper will be reviewed
Nilsson (Lund University)	11	26	21	-	-	11.4	-	-	"State more briefly your definition of barriers. Intermittency is not ""man-made"" barrier. It is an issue with some RES and it seems that the jargon is moving torwards variability rather than intermittency."	see glossary
Mu&#65533;oz (Pardee Center, Boston University)	11	26	21	-	-	11.4	-	-	a barrier is missing: social acceptance (NIMBY, reluctance to new techs)	Comments noted. List will be removed and reference ot Chapter 1 made where taxonomy of barriers is discussed.
Klessmann (Ecofys Germany)	11	26	21	-	-	11.4	-	-	Important literaturesource that analyses barriers to RE in Europe and should be quoted here: Ragwitz, M., Held, A., Resch, G., Faber, T., Haas, R., Huber, C., Morthorst, P.E., Jensen, S.G., Coenraads, R., Voogt, M., Reece, G., Konstantinaviciute, I., Heyder, B., 2007. OPTRES. Assessment and optimisation of renewable energy support schemes in the European electricity market. Final report. Karlsruhe.	Study will be reviewed.
Pugh (U.S. Department of Energy)	11	26	21	34	24	11.4	-	-	The use of the acronym NSE is problematic in this chapter in that the author sets up RE vs. NSE as equivalent to climate-change inducing vs. climate change mitigating. There is not a one-to-one correspondence. Some NSE technologies like nuclear and CCS may play signfificant roles in mitigation, while some RE technologies may not be sustainable or result in mitigation, like unconstrained production of first-generation biofuels. More precise language would be preferable.	See 11.4.2 line 35 for NSE. Need to clarify difference between NSE technology and NSE policy.
Kyte (E.ON AG)	11	26	21	-	-	11.4	-	-	There is a listing of barriers in the chapter introduction but the connection to the subparagraphs is not clear.	Comments noted. List will be removed and reference ot Chapter 1 made where taxonomy of barriers is discussed.
Nilsson (Lund University)	11	26	21	-	-	11.4	-	-	There is no level playing field in many countries - but in other countries you could argue that subsidies are too generous (tax rebates for biofuels translate into pretty high carbon prices, I think).	Comment is noted.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
NADAI (CIRED)	11	26	21	-	-	11.4.	-	-	"The articulation between ""failure"" and ""barrier"" is not clear to me. Failure is an analytical concept of economy, whereas barrier is a more descrptive notion of what hampers the deployment of RE. There is an attempt in this section to sort out what is what, both in the figure and in the structure of the section. However, the relation between the two is not made clear AND it would anyway be very difficult to make it clear. Indeed, there are important overlaps between the two without it being easy to structure the way in which these notions do overlap. For instance, for neo instituional economics (Williamson, Coase etc) information asymetries, non exclusion , indivisibilities or environmental externalities are symptoms of positive transaction costs and allocation of property rights... 11.6.7 also deals with the existence of multipel market failures and the need for RE policies. Coordination between the two sections can be improved, may be y keeping the discussion of market failures in 11.6.7, referrring to it and cocnentratign and policy failure and barriers in 11.4. "	Section removed.
Mu&#65533;oz (Pardee Center, Boston University)	11	27	4	-	-	-	-	-	"delete: ""there is no 'level playing field' for RE technologies"" the meaning stays the same"	Accepted
Pugh (U.S. Department of Energy)	11	27	21	27	21	-	-	-	"Footnote 5 makes a valid point but is unnecessarily controversial and policy prescriptive in effectively describing the ""nuclear renaissance"" as an example of a ""perverse goal""."	as reviewer states the point is to be stated, the example has to be changed to be less controversial - what remains is the point that valid opposition to particular options is also named bariers
Garcia (Renewable Energy Center)	11	27	4	27	6	-	-	-	"May I suggest to add, at the end of the first bullet: ""including direct or indirect subsidies for fossil fuel energies.""""	will be added (but full list may be re-edited)
Garcia (Renewable Energy Center)	11	27	22	27	22	-	-	-	"Should be used ""optimised"" instead of ""maximised"". In same cases, there are technical or strategical limits to expand endless deployment of specific RE tecnologies within the boundaries of a limited energy system."	changed as asked
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	27	22	27	23	-	-	-	"This also refers to comment no.2. The statement in these lines suggests unconditional maximisation, which is untenable. There should be side conditions for fulfilling various sustainability criteria, for economic, ecological, and social aspects. "	the point will be met e.g. by replacing maxim by optim, and add conditions
Mu&#65533;oz (Pardee Center, Boston University)	11	27	7	27	8	-	-	-	bullet point same as above. Delete. If specific reference to stranded costs desirable, can be made in point above.	agree with reviewer; the section will be rewritten
NADAI (CIRED)	11	27	-	27	-	-	-	-	FOOTENOTE 5 : What is meant here, i do not understand.	The explanation of how the term barrier is used will be maintained and may be added to glossary, but the footnote will go
Klessmann (Ecofys Germany)	11	27	-	-	-	-	-	-	Footnote 5 does not really fit here and could be deleted	The explanation of how the term barrier is used will be maintained and may be added to glossary, but the footnote will go

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Mu&#65533;oz (Pardee Center, Boston University)	11	27	-	-	-	-	-	-	Footnote 5: can be deleted if we need to save space.	The explanation of how the term barrier is used will be maintained and may be added to glossary, but the footnote will go
Nilsson (Lund University)	11	27	21	-	-	-	-	-	Footnote 5: I think this footnote is unnecessary and actually counter productive.	The explanation of how the term barrier is used will be maintained and may be added to glossary, but the footnote will go
Rosinski (Electric Power Research Institute)	11	27	3	27	16	-	-	-	Need to add bullet that some RE technologies are not currently cost competitive with other energy options.	the fact stated by reviewer is right, but not considered as a barrier
Mu&#65533;oz (Pardee Center, Boston University)	11	27	22	27	23	-	-	-	Precriptive sentence. Delete.	statement modified or deleted
Klessmann (Ecofys Germany)	11	27	31	-	32	-	-	-	Quoted literature is not linked correctly to the sentence (does not say that governments, energy systems etc. are more complex than a diagram can show, but that they are complex)	Section 4 is going to be divided between chapter 1 and chapter 11. This particular section will be changed considerably
Klessmann (Ecofys Germany)	11	27	22	-	23	-	-	-	Second half of the sentence is not correct: maximising deployment is independent of maximising the potential (as explained a few lines down in the text)	this sentence will be deleted
Nilsson (Lund University)	11	27	22	-	-	-	-	-	The goal of whom? Does the reference really say that? In what context?	this sentence will be deleted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	27	7	27	8	-	-	-	The phrase needs to be rewritten.	agree with reviewer; the section will be rewritten
Soliano Pereira (Universidade Salvador - UNIFACS)	11	27	21	-	-	-	-	-	The title of this sub-section needs to be reviewed, as it deals only with market failures and market barriers, not policy barriers. Foot note also can be dropped.	Section 4 is going to be divided between chapter 1 and chapter 11. This particular section will be changed considerably
Mu&#65533;oz (Pardee Center, Boston University)	11	27	15	-	-	-	-	-	unclear what it means. Seems same as first bullet point. If different, clarify, if not, delete.	this will be rewritten
Mu&#65533;oz (Pardee Center, Boston University)	11	27	16	-	-	-	-	-	would divide into two bullet point. One is awaraness, which includes awaranes of technologies, financing options, regulatory framwork, etc. The other is skills, not only at the technical level.	this will be divided
Hamilton (Chatham House)	11	27	11	27	11	11.4	-	-	Financing is widely available, at market rates, where underlying conditions make RE an attractive investment option, as per growth in investment shown earlier in the chapter. During the financial crisis RE faced capital constraints, in common with other sectors. That said, some geographies, sub-sectors and deal-sizes find it harder to access finance than others. 'Unreasonably costly' is incorrect. It might be better to say something like 'Access to finance varies by technology and the appetite for risk of financial institution'.	this will be rewritten
Londo (Energy research Centre of the Netherlands)	11	27	4	27	16	11.4	-	-	In this list, I miss the basic notion that renewables are often more costly than their conventional counterparts, at least in their initial development stage.	the fact stated by reviewer is right, but not considered as a barrier
Klessmann (Ecofys Germany)	11	27	21	-	-	11.4.1	-	-	Difference / relation of market failures and market barriers does not become clear.	Section 4 is going to be divided between chapter 1 and chapter 11. This particular section will be considerably changed

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
NADAI (CIRED)	11	28	21	-	-	-	-	-	"""cost are sub additive"" : this is not comon knowledge outside of economists, please define or parapphrase."	this part of the text is deleted (due to coverage on another place)
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	28	8	29	28	-	-	-	"it would be more conducive to discuss the simply those economic concepts and theories, that do provide a basis for assessing market imperfections, market dynamics (often forgotten in CH-11), complemented with views from other sciences, "	this part of the text is deleted (due to coverage on another place)
Klessmann (Ecofys Germany)	11	28	1	-	-	-	-	-	"The section does not ""explain figure 6 in more detail"". "	this part of the text is deleted (due to coverage on another place)
Kessels (International Energy Agency Clean Coal Centre)	11	28	1	28	4	-	-	-	Delete as it is going to be covered later	this part of the text is deleted (due to coverage on another place)
Mu&#65533;oz (Pardee Center, Boston University)	11	28	1	28	4	-	-	-	fix if fig 6 is deleted as suggested in comment 50 above.	this part of the text is deleted (due to coverage on another place)
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	28	8	28	11	-	-	-	Making a caricature of some tight neo-classical constructs as if it would represent a large part of current economics is a useless piece of text.	this part of the text is deleted (due to coverage on another place)
Mu&#65533;oz (Pardee Center, Boston University)	11	28	12	29	9	-	-	-	there is no need to elaborate. Bullet points can be deleted and just leave references. If bullet points are left, i would explain them in RE terms, as is done in 11.4.1.2.	this part of the text is deleted (due to coverage on another place)
Nilsson (Lund University)	11	28	7	-	-	11.4.1.1	-	-	Is Nobel laureate M Ostrom worthy of a quote here? Furthemore I though information also counted as a classic market failure.	this part of the text is deleted (due to coverage on another place)
Klessmann (Ecofys Germany)	11	28	7	-	-	11.4.1.1	-	-	Second sentence does not have a clear message and does not explain ist terminology. Relation of first paragraph and bullet points is also not clear (are the bullet points arguments pro and con or actual market failures?)	this part of the text is deleted (due to coverage on another place)
Londo (Energy research Centre of the Netherlands)	11	28	12	29	9	11.4.1.1	-	-	The different market failures are described in a very abstract way. As I reckon the audience for the report includes specialist without elaborate education in economics, I'd suggest making the descriptions slightly more down-to-earth.	this part of the text is deleted (due to coverage on another place)
Soliano Pereira (Universidade Salvador - UNIFACS)	11	28	7	29	15	11.4.1.1	-	-	This part of the section which provides a theoretical concept of market failure can be eliminated. It reprroduces the concept of market failure in a broad sense, not fully adapted to RE reality. This can go to the glossary, if necessary.	this part of the text is deleted (due to coverage on another place)
Klessmann (Ecofys Germany)	11	28	7	-	-	11.4.1.1	-	-	This section could be shortened and focus more on the market failures which are relevant for RE.	this part of the text is deleted (due to coverage on another place)
Londo (Energy research Centre of the Netherlands)	11	28	8	28	11	11.4.1.1	-	-	This sentence may be humorous for the insiders but hard to grasp for non-economists. Some minor explanation to make them laugh too would be appreciated.	this part of the text is deleted (due to coverage on another place)

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Soliano Pereira (Universidade Salvador - UNIFACS)	11	28	7	-	-	11.4.1.1	-	-	Two long explanations on the concepts of innovation (on 11.1.2) and market failures (11.4.1.1) could be eliminated from the text without compromizing the understanding. These concepts are well established, and unless clearly connected to RE could be avoided in the text. Later in the text these two concepts are again redefined."	this part of the text is deleted (due to coverage on another place)
Nilsson (Lund University)	11	28	7	-	-	11.4.1.1.	-	-	Will you present the scale of current RES subsidies here or elsewhere? I have seen OECD reports estimating the size of biofuels subsidies in the area of 10-15 billion (EUR or USD) so it isn□t peanuts	this part of the text is deleted (due to coverage on another place)
Mu□oz (Pardee Center, Boston University)	11	28	-	-	-	-	6	-	figure does not clarify content or add useful information. Delete	this part of the text is deleted (due to coverage on another place)
Langniss (Fichtner KG)	11	28	-	-	-	-	6	-	Needs some explanation e.g. meaning of arrows?	this part of the text is deleted (due to coverage on another place)
Klessmann (Ecofys Germany)	11	28	-	-	-	-	6	-	The figure is very unclear and not useful to understand the relation between the different elements.	this part of the text is deleted (due to coverage on another place)
Soliano Pereira (Universidade Salvador - UNIFACS)	11	28	6	-	-	-	6	-	This figure is not very helpful. It should be either dropped or revamped. In this last case, it must be more explained in the text.	this part of the text is deleted (due to coverage on another place)
Kessels (International Energy Agency Clean Coal Centre)	11	28	6	28	-	-	Delete figure 6	-	This figure is difficult to understand, might be better to make it a more distributed or separate diagram	this part of the text is deleted (due to coverage on another place)
Mu□oz (Pardee Center, Boston University)	11	29	11	-	-	-	-	-	"""disturbing"" mening ""distorting""? Word ""disturbing "" can be misinterpreted, shoul dbe changed."	when text survives, corrections will be made
Haum (German Advisory Council on Global Change)	11	29	11	29	11	-	-	-	"Sentence end with ""skewed distributions"" The particular distributions need to be added in order to make sense"	when text survives, will add "income" to distributions
Mu□oz (Pardee Center, Boston University)	11	29	25	29	28	-	-	-	can be deleted if text needs to be cut	will be deleted; probably more will be deleted from section 11.4.1.1
Garcia (Renewable Energy Center)	11	29	1	29	9	-	-	-	May I suggest to add a third market failure related to innovation barriers. RE atributes are not perceived by consumers. In other innovations fields (IT technologies, pharma, cosmetics) the innovation is perceived by the costumer and he/she could be willing to pay more for the perceived attribute of the innovation. In the RE, the innovation is in the origin of the energy, not in the consumption, so it is very difficult to get a willingness to pay more for RE.	the text here will be deleted, but the point will be reminded and included where useful; can reviewer provide reference?

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	29	16	29	28	11.4.1.1	-	-	" Consider adding a reference to the work of Shimon Awerbuch linked to the costs attached to fossil fuel price volatility [and the corollary which is the benefit of RE in lowering that overall cost to the economy], I will supply potential references, Awerbuch is widely published, and as per comment to Chapter 1: Recommend reflecting extensive work done by Shimon Awerbuch, whose work examined the matter of using finance portfolio theory to better understand the role of renewable energy in reducing risks associated with fossil fuel price volatility. A series of references can be provided (Shimon Awerbuch was invited to be a Contributing Author to AR4);Dr Awerbuch's website and publications remain active: www.awerbuch.com. An academic book was published by Elsevier Science in 2008 to mark his untimely death: ""Analytical methods for energy diversity and security : portfolio optimization in the energy sector, a tribute to the work of Dr. Shimon Awerbuch / Morgan Bazilian and Fabien Roques, editors. . "	when text remains, reference will be checked and added
Mu&#65533;oz (Pardee Center, Boston University)	11	30	33	-	-	-	-	-	"""must"" Prescriptive text, change or delete sentence"	Accepted
Nilsson (Lund University)	11	30	37	-	-	-	-	-	"""RE deployment has relatively few externalities and risks."" I wish those were given more serious treatment to increase balance and cred of chapter."	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	30	24	-	-	11.4.2	-	-	"Provided that the section 11.4 is on Barriers to Implementation, this sub-section on ""Policies to address market failure and barriers can be transferred to the appropriate section on policies. "	Restructuring takes place
Hamilton (Chatham House)	11	30	24	-	-	11.4.2	-	-	I would consider inserting section 11.4.4 above 11.4.2, and definitely above 11.4.3.policy barriers and failures (which certainly impact RE financing and which countries are attracting capital). This would keep the policy sections together and prevent an artificial split between market barriers and financing barriers.	11.4.1 and 11.4.2 will be cancelled.
POUFFARY (ADEME - French Environment and Energy Management Agency)	11	30	-	-	-	-	11.4.2	-	Appropriate policies in a short term are not enough to address failures and barriers since they need to be clearly designed and implemented in a long term perspective in order to secure the market transformation view from the private sector and to give enough confidence to end users in the supported technologies.	Accepted
Mu&#65533;oz (Pardee Center, Boston University)	11	31	40	-	-	-	-	-	"""neoclassical growth mantras"" find more neutral language to convey same idea."	substitute theories for mantras
Mu&#65533;oz (Pardee Center, Boston University)	11	31	28	-	-	-	-	-	"""the last decade"" better spceify with years, e.g., 2000-2010, or 1995-2005"	now: since 2000
Soliano Pereira (Universidade Salvador - UNIFACS)	11	31	35	-	-	-	-	-	"Eliminate ""we"""	ok, will be changed

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
McCormick (International Union for Conservation of Nature (IUCN))	11	31	24	-	-	-	-	-	"Since this seems to be a list, it would be helpful to add the word ""and"" before ""fall short in□"""	Will be added.
Kessels (International Energy Agency Clean Coal Centre)	11	31	1	31	1	-	-	-	Define FIT	See glossary
Kessels (International Energy Agency Clean Coal Centre)	11	31	28	31	34	-	-	-	Delete paragraph	it may be that the paragraph will be deleted when the contents are dealt with on other place in ch.11
Mu&#xFFFD;oz (Pardee Center, Boston University)	11	31	8	31	12	-	-	-	need a more recent reference. Much has changed since 1999	Lines 8 - 12 are now cancelled.
NADAI (CIRED)	11	31	35	31	41	-	-	-	This is a major issue in the current development of RE which is not given enough discussion in this chaoter and in the overall SRENN report. The example of wind power, whihc has been developed esssentially based on industrial pattern and bulk model, should serve as a basis for discussing the conditions for small scale RE, contribution of RE to enregy access, decentralized generation etc ... This should be discussed in a more in depth way in oxford in order to identify who has competence to develop this isssue in a structured and informed way in several chapters espcially 8, 9, 10 and 11.	confirmation of ch.11 points of view
Mu&#xFFFD;oz (Pardee Center, Boston University)	11	31	3	31	16	-	-	-	this is more about innovation than barriers, should be merged into 11.1.2 or 11.5.1	Lines 8 - 12 cancelled.
Kimura (Central Research Institute of Electric Power Industry)	11	31	-	33	-	11.4.3	-	-	"Governmental failure in selecting appropriate technologies should be added and discussed in this section. There are number of failures where the technology selection by the government brought disappointing results. This is inevitable because the innovation process is inherently uncertain and because the government can never have perfect information on the future of the technology as well as the future market (Cohen and Noll 1991, US NRC 2001, Kimura and Suzuki, 2006). Kimura and Suzuki (2006) describes how Japan has made a clear failure in developing solar thermal power generation technology in the 1980s. See: Kimura, O., Suzuki, T., 2006, 30 years of solar energy development in Japan: co-evolution process of technology, policies, and the market, Berlin Conference on the Human Dimensions of Global Environmental Change, November 2006, Berlin. http://userpage.fu-berlin.de/ffu/akumwelt/bc2006/papers/Kimura_Suzuki.pdf Cohen, L., Noll, R., 1991, The Technology Pork Barrel. The Brookings Institution: Washington D.C. US NRC (National Research Council), 2001, Energy Research at DOE: Was it worth it? Energy Efficiency and Fossil Energy Research 1978 to 2000. National Academy Press."	good point; ask publication copies from reviewers

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Pugh (U.S. Department of Energy)	11	32	17	32	19	-	-	-	"""only a full transition from NSE to RE systems will suffice"" for ""climate mitigation policies""? This implies that there are no other options, i.e. CCS or nuclear power. It is important not to equate sustainability and climate change mitigation. In the long run they are likely to converge, but in the short run it may be necessary to use non-sustainable technologies for the greater societal benefit of achieving climate change mitigation objectives. That judgment, however, is up to policy-makers, not IPCC."	there are various visions on the point raised by reviewer and must be reflected in the assessment; we will take care to present the visions in a balanced way
Garcia (Renewable Energy Center)	11	32	30	-	-	-	-	-	"May I suggest to add the following paragraph after line 30: Coordination between public agencies is crucial to develop RE because its deployment is more complex than conventional energies for many reasons, including monitoring phase and meteorological forecast; over regulation upon small scale projects; many agencies related to a single project, etc. "	idea will be included, but wording will change. ASK references to reviewer
Kessels (International Energy Agency Clean Coal Centre)	11	32	22	32	22	-	-	-	CDM used for first time, define	see glossary
Kessels (International Energy Agency Clean Coal Centre)	11	32	27	32	30	-	-	-	Could delete this paragraph its unreferenced and you could argue that not all countries do this, there are some that do have effective institutions although mostly in OECD countries, eg Germany feed in tarrif	the variety in experience has to be expressed; needs reference -
Haum (German Advisory Council on Global Change)	11	32	34	32	35	-	-	-	Explanation why RE need interdisciplinary education is missing	reference Twidell and Weir argue this extensively
Klessmann (Ecofys Germany)	11	32	15	-	-	-	-	-	Here you should quote IPCC AR4 (2007)	right, higher level source is better
Tagashira (Central Research Institute of Electric Power Industry)	11	32	7	-	8	-	-	-	However, as shown in chapter 10, there are some estimates incorporating external costs. Considering the balance between chapter 10 and 11, the author should refer to the results of chapter 11 here.	right comment, but does not really affect the meaning of the text
NADAI (CIRED)	11	32	17	32	19	-	-	-	same remark.	we accept this need
Pugh (U.S. Department of Energy)	11	32	22	32	26	-	-	-	The fact that the CDM may place RE at a disadvantage relative to methane capture and HFC-23 destruction is not necessarily perverse in the context of achieving mitigation objectives. Mitigation does not equal RE alone. An example of a perverse incentive is the building of more HCFC-22 production facilities to obtain HFC-23 destruction credit, but that's not what you describe here.	the reviewer agrees with the main line of the text, but asks to be more detailed about what aspect can be called perverse; editorial clarity will be raised
Kessels (International Energy Agency Clean Coal Centre)	11	32	31	32	36	-	-	-	This is a opinion and I would argue untrue, traditionally universities did focus on technical issues but they have broadened that out to more multi displinary areas including economics, environmental impacts, etc	text will be reworded; reference to positive development on this point, cxan reviewer provide PR references in helping us?
POUFFARY (ADEME - French Environment and Energy Management Agency)	11	32	6	-	-	-	-	-	View from a public authority perspective, evaluation means also the leverage effect of public money versus effectiveness of the market transformation. At the end, all policy makers expect market transformation to be as real as they will no need anymore of public funds to support RE technolgies deployement.	we accept this need

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Londo (Energy research Centre of the Netherlands)	11	32	4	32	13	11.4.3	-	-	"Although I mostly agree with this section, I'd like to make one nuancing remark: it is the task of policy makers (or better: of politicians) to make balanced decisions between different interests. In doing so, the long-term energy and climate objectives will not be the only interests for them to have in mind. As a colleague once put it: ""an intensification of a Feed-in subsidy budget for offshore wind, that's a lot of hospital beds"". So although I adhere to the urgency of a transition in our energy economy, and the riskfulness of sticking to conventional options, most renewable energy incentives simply requires public means, which can also be used for other (public) interests. May be a nuancing remark somewhere would prevent you from the being suspected from all to narrow viewpoints. "	we accept this need
Hongo (Japan Bank for International Cooperation)	11	32	16	32	17	11.4.3	-	-	I am afraid that 'A first and major policy failure may be setting the wrong or too weak goals' is not objective expression. There is no internationally Accepted methodorogy for setting □appropriate□ goal and it is difficult to say failure or appropriate from economic point of views. Please remember this point was a serious political argument in Germany like that subsidies for RE VS coal with social benefit. Under current situation □Goals or targets□ are decided politically and it also depends on natural conditions of host countries for RE.	will be considered in new text
Hongo (Japan Bank for International Cooperation)	11	32	23	32	23	11.4.3	-	-	I am afraid that 'at comparative disadvantage in CDM' is not appropriate expression when we compared it with CDM by Energy efficiency although HFC and industrial gas projects may get a big amount of CERs due to higher CO2 conversion factors. A difficulty of RE type CDM is mainly by low economic of RE projects and if projects may sell CERs which will be generated beyond 2012, more revenue is expected and could be stronger incentives.	the statement is based on PR literature; reviewer suggests further discussion of CDM; this will prove not possible because not within the SRREN scope
Soliano Pereira (Universidade Salvador - UNIFACS)	11	33	11	-	-	-	-	-	"Eliminate ""we"""	agree: the phrase '"as we have seen" is a waste of words and scarce place
Haum (German Advisory Council on Global Change)	11	33	18	33	18	-	-	-	"Notion of ""up front requirements"" needs explanation/ illustration. Do you mean higher initial capital cost vs.operating cost compared to brown electricity generation technology? "	yes, text will be clarified
Kessels (International Energy Agency Clean Coal Centre)	11	33	38	33	40	-	-	-	Again donors have strict requirements or crtieria before financing RE projects, what are they why are they diffcult to meet an explaination is needed and examples would help as well	Example from Pacific Islands will be provided. Need to change usually on line 39 to sometimes.
Haum (German Advisory Council on Global Change)	11	33	22	33	26	-	-	-	CDM example remains unclear	yes, text will be clarified
NADAI (CIRED)	11	33	23	-	-	-	-	-	CER, please define.	Accepted
Kessels ( )	11	33	35	33	36	-	-	-	Chequered history, examples where are they if you are going to be criticial of failed aid projects you should put in some examples and the reasons for their failure	check with Stephen Karakezi to add one or two examples. Dan says he has written on this.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kessels (International Energy Agency Clean Coal Centre)	11	33	11	33	12	-	-	-	Delete sentence not needed its already been discussed	Ok save place
Kessels (International Energy Agency Clean Coal Centre)	11	33	8	33	9	-	-	-	Documented phenomenon, references needed or delete	need references (economics regulation literature)
NADAI (CIRED)	11	33	42	-	-	-	-	-	GEF, idem	Global Environment Facility
Devernay (Electricity of France - EDF Hydro Engineering Centre)	11	33	42	34	2	-	-	-	The World Bank's Water Ressources Sector Strategy (2003) indicates a willigness of the World Bank to reengage in the funding of sustainable hydropower projects, including large ones.	Reviewer comment supports the point.
Mu&#65533;oz (Pardee Center, Boston University)	11	33	31	33	34	-	-	-	unclear what the point is	will clarify
Hamilton (Chatham House)	11	33	35	34	8	11.4.4	-	-	"There are a range of grey literature reports that are relevant to considering public financing in developing countries; care needs to be taken to set CDM in the context of wider investment flows to RE in developing countries. For the most part though with some notable exCDM/CERs are currently 'icing on the cake' for financing RE, compared to the far more significant role that RE and energy (including utility) policy plays. References can be provided."	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	33	18	33	22	11.4.4.	-	-	"This section is important and would benefit from laying out some of the basics of how finance works, including the centrality of risk and return. I would add this after the sentence ending in line 22 before the CDM example (which is a bit confusing). In my own work policy needed to be cover a range basics such as planning and licensing; grid availability and access regulations, as well as support or incentives and its design. In developing countries (an evidence-base paper is forthcoming) utility policy more generally is very important, particularly in the assessment of the creditworthiness of the offtaker. Policy also needs to reflect the different characteristics of the sub-sectors - so for biomass or biofuels, trade-related policy might be a critical factor as financiers try to get an assessment of feedstock costs. There aren't academic sources widely available on this; however relevant grey literature sources are: O□Brien, V.S. and Usher, E., 2004, □Mobilising Finance for Renewable Energies: Thematic Background Paper□, prepared for the International Conference for Renewable Energies, Bonn. 'Private Finance for Renewable Energy - A Guide for Policymakers', December 2009, Chatham House, Bloomberg New Energy Finance, UNEP. Hamilton, K, December 2009, 'Unlocking Finance for Clean Energy: the Need for 'Investment Grade' Policy, Programme Paper, Chatham House. Deutsche Bank Climate Change Advisors, December 2009, 'Paying for Renewable Energy: TLC at the Right Price, Achieving Scale through Efficient Policy Design'; Ecofys, October 2008, Report prepared for IEA-Renewable Energy Technology Deployment, □Policy Instrument Design to Reduce Financing Costs in Renewable Energy Technology Project□. I have just tracked down another which may be relevant: Gross, R., Heptonstall, P., Blyth, W., Risks, revenues and investment in electricity generation: Why policy needs to look beyond costs, Energy Economics (2009), doi:10.1016/j.eneco.2009.09.017"	will update the text
McCormick (International Union for Conservation of Nature (IUCN))	11	34	31	34	31	-	-	-	"Re-word: ""move niche technologies to being fully commercial"""	Accepted
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	34	25	71	7	-	-	-	"section 11.5 is far too large and should be much more synthesizing issues instead of mainly examples, and treatment by technology sub-alternative"	will restructure section
Haum (German Advisory Council on Global Change)	11	34	18	34	24	-	-	-	"What are the reasons for ""pay back gap""?"	To be further clarified
Klessmann (Ecofys Germany)	11	34	10	-	-	-	-	-	2008 and 2009	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kessels (International Energy Agency Clean Coal Centre)	11	34	23	34	24	-	-	-	Add examples of pay back gap and reference	payback gap well documented on EE investments . Will check for examples on RE investments.
Kessels (International Energy Agency Clean Coal Centre)	11	34	26	34	35	-	-	-	Do not need this introductory paragraph	WILL TAKE INTO CONSIDERATION AS WE REDRAFT
Kessels (International Energy Agency Clean Coal Centre)	11	34	1	34	-	-	-	-	I agree but you need examples of CDM costs and a breakdown, I suggest looking at the UNEP website or GEF to identify literature and costs	There is no standard costs for all projects. It varies depending on size , location, etc. Page 34 lines 2 - 5 provides reference and more clarity.
Soliano Pereira (Universidade Salvador - UNIFACS)	11	34	26	34	29	-	-	-	The distinction between policies for developing and promoting RE and those to overcome the different types of barriers should be made clear.	Accepted
Klessmann (Ecofys Germany)	11	34	17	-	-	-	-	-	which barriers?	Will check actual barriers in Walker, 2008a
Hamilton (Chatham House)	11	34	9	34	13	11.4.4	-	-	"It may be useful to explain the financial crisis a bit more thoroughly. There are surveys on this by UNEP's Sustainable Energy Finance Initiative; there are sections explicitly on this in the Finance Guide (reference above) and in my own work based on evidence from financiers at the time; and Bloomberg New Energy Finance has also done extensive work in this area; including around the public stimulus packages, their scale and impact. I'm not sure Econcern would necessarily describe themselves as 'maverick'. The final sentence of that paragraph does not accurately reflects the situation: banks can and do structure risk for renewable energy projects, the perception of risk and the ability of a financial institution to take technology risk (and more centrally policy risk) however does vary. Sources on the financial crisis (plus New Energy Finance): UNEP, SEFI, New Energy Finance, Frankfurt School of Finance and Management: 'The Global Financial Crisis and its Impact on Renewable Energy Investment, April 2009. Sections on the financial crisis in: 'Private Finance of Renewable Energy - A Guide for Policymakers', Chatham House, Bloomberg New Energy Finance and UNEP, December 2009. Hamilton, K., 'Unlocking Finance for Clean Energy: the Need for Investment Grade Policy', Chatham House Programme Paper, December 2009."	Accepted
Nilsson (Lund University)	11	34	25	-	-	11.5	-	-	It would be nice if the different characteristics of RES and RES techs (scale, variability, modularity etc) was noted as well as resulting policy implications.	will be addressed through matrix in section 11.1 and text here.
Sonntag-O'Brien (REN21)	11	34	-	-	-	11.5	-	-	Suggest consulting the work by Ecofys on policy design and the cost of financing RE done for the IEA RETD 2008 http://www.iea-retd.org/files/RETD_PID0810_Main.pdf	WILL REVIEW
Kessels (International Energy Agency Clean Coal Centre)	11	34	25	96	18	11.5 OR 11.6	-	-	General Comment I was surprised to find little discussion on the use of the CDM, why was this is it seen as a failure?	It will be covered elsewhere - mentioned in 11.2 in terms of trends and then under financing in 11.5

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kessels (International Energy Agency Clean Coal Centre)	11	34	25	96	18	11.5 OR 11.6	-	-	General Comment I was surprised to find little discussion on the use of the CDM, why was this is it seen as a failure?	Accepted
NADAI (CIRED)	11	35	10	35	17	-	-	-	the sturcture of the introduciton can be made sharper and more to the point. May be shorten it and pass line 1O to 17 at the beginning of 11.5.1.1	WILL CONSIDER AS REDRAFT
Haum (German Advisory Council on Global Change)	11	35	18	-	-	-	-	-	Word missing in headline	The final draft of the SRREN will be processed by a professional copy-editor. All editorial comments such as this will be resolved at that time.
Philibert (International Energy Agecy)	11	35	3	-	-	11.5.1	-	-	A graphical presentation of the different types of policies and at which stage of technology development/maturity they are most often implemented would help the reader gain an overview of the subsequent sections.	to be addressed through matrix in section 11.1 and text in 11.5.
NADAI (CIRED)	11	35	18	-	-	11.5.1.1.	-	-	The tile of the text is not understandable (typo?)	WILL EDIT SECTION TITLE
Praessler (PIK)	11	35	18	-	-	11.5.1.1	7	-	Trivial and does not add to info in text + not professional diagramm --- potential to cut	figure will be revised if we keep it
Praessler (PIK)	11	35	18	-	-	11.5.1.1	8	-	Again, unclear diagram. Revision & simplification recommended	will revise
NADAI (CIRED)	11	36	-	-	-	-	-	4	"would be clearer if RD&D would appear also under ""innovation"" in the left column, as RD&D is one off the most employed term in the text. // extreme right ""radical"" to ""mature"" is in too samll font; "	The final draft of the SRREN will be processed by a professional copy-editor. All editorial comments such as this will be resolved at that time.
Soliano Pereira (Universidade Salvador - UNIFACS)	11	36	-	-	-	-	-	4	This figure is very theoretical and not clearly linked to RE dimension. It should be either eliminated or more explored in the text in the potential linkages with RET.	will be deleted
Mu&#65533;oz (Pardee Center, Boston University)	11	36	-	-	-	-	-	4	would not print in my version	Accepted
Praessler (PIK)	11	37	10	-	-	11.5.1.2	-	-	11.5.1.2.1-11.5.1.2.6 is too detailed. One paragraph mentioning some very pointed examples would suffice here.	Accepted
NADAI (CIRED)	11	37	10	-	-	11.5.1.2	-	-	add (RD&D) at the end of the title	WILL CONSIDER
Londo (Energy research Centre of the Netherlands)	11	37	15	38	7	11.5.1.2.1	-	-	I'm not entirely sure if the 'valey of death' notion should be in the Technology development subsection. One could also argue that most policies aiming at initial deployment (11.5.2 and beyond) aim at supporting learning-by-doing for a technology that is not yet competitive as such.	notion normally applies to technology development, but can also be understood as applying to early deployment. Will consider mentioning in deployment section.
McCormick (International Union for Conservation of Nature (IUCN))	11	38	-	-	-	11.5.1.2.2	-	-	Mention some U.S. examples, such as NREL.	WILL CONSIDER AS REDRAFT
de Haan (Ernst Basler + Partner AG)	11	38	-	-	-	-	8	-	"Fig. 8 gives only little added value over Fig. 1. Moreover, it features some categories that are missing in Fig. 1 (public VC, incubators). Please consider to delete Fig. 8; alternatively, bring it more into line with Fig. 1."	WILL MERGE AND USE ONLY ONE FIGURE

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kessels (International Energy Agency Clean Coal Centre)	11	38	2	38	-	-	Figure 8	-	Is it possible to use an alternative valley of death illustration this one is not that clear to the reader	WILL CONSIDER AS REDRAFT
NADAI (CIRED)	11	38	-	-	-	-	-	8	"A lot of terms in the figure whcih would need some clarification; "	Accepted
Paredes (Inter-American Development Bank)	11	39	8	-	-	11..5.1.2.4	-	-	This belongs more to a side box for a successful collaboration case than for the main text.	WILL CONSIDER
Soliano Pereira (Universidade Salvador - UNIFACS)	11	39	1	-	-	11.5.1.2.3	-	-	It could explore more the international networks on renewables, biofuels, hydrogen, EV, etc., besides the IEA Technology Agreements on Renewable Energy Technologies: Bioenergy, Geothermal, Hydrogen, Hydropower, Ocean Energy Systems, Photovoltaic Power Systems, Renewable Energy Technology Deployment, Solar Heating and Cooling, SolarPACES, Wind Energy Systems	WILL CONSIDER
Mu□oz (Pardee Center, Boston University)	11	39	8	-	-	11.5.1.2.3	-	-	no point seems to be made other than existence by example. Can be deleted	(SIMILAR TO COMMENT 648)
Mu□oz (Pardee Center, Boston University)	11	39	1	-	-	11.5.1.2.4	-	-	no point seems to be made other than existence by example. Can be deleted	WILL CONSIDER
Soliano Pereira (Universidade Salvador - UNIFACS)	11	39	8	-	-	11.5.1.2.4	-	-	Very poor with just one example. It needs to be better elaborated.	WILL LOOK FOR ADDITIONAL EXAMPLES
Paredes (Inter-American Development Bank)	11	39	28	-	-	11.5.1.2.6	-	-	The Inter-American Development Bank also launched the Energy Innovation Contest IDEAS (www.iadb.org/ideas) together with the German Cooperation Agency (GTZ), the Global Village Energy Partnership (GVEP) and the Government of South Korea. More than 20 winers obtained U$200.000 grants to finance the implementation of innovative ideas with a potential for further upscaling.	WILL CONSIDER, BUT MIGHT OMIT EXISTING EXAMPLE
Nilsson (Lund University)	11	39	28	-	-	11.5.1.2.6	-	-	What□s the relevance of existence of prizes?	Accepted
Tagashira (Central Research Institute of Electric Power Industry)	11	39	8	-	-	5.1.2.4, 5.1.2.6	-	-	These sections are important. However, if chapter 10 must be reduced by 23 pages, these sections would be candidates for a cut.	WILL CONSIDER

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kimura (Central Research Institute of Electric Power Industry)	11	40	1	-	16	-	-	-	"One important lessons from public R&D programs is that most of the projects fail but a small portion of it succeeds, whose returns pay off the overall investments. This is empirically demonstrated by Kimura (2009a) taking cases of Japanese renewable energy and energy efficiency R&D programs. This point is shown also by Kimura (2009b) and NRC (2001) although by taking cases of energy efficiency R&D and fossil fuel R&D. See: Kimura, O., 2009a, The National Programs for Development of Energy Technologies, SERC Discussion Paper 09007, Central Research Institute of Electric Power Industry. http://www.climatepolicy.jp/thesis/pdf/09007dp.pdf Kimura, O., 2009, Is public R&D in energy efficiency really effective?: a case in Japan and its implications, Proceedings of ECEEE Summer Study on Energy Efficiency, pp.353-361. NRC (National Research Council), 2001, Energy Research at DOE: Was it worth it? Energy Efficiency and Fossil Energy Research 1978 to 2000. National Academy Press."	WILL REVIEW
McCormick (International Union for Conservation of Nature (IUCN))	11	40	31	40	33	-	-	-	"Redundant use of ""instruments"" in this sentence."	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	40	22	40	25	-	-	-	Poorly structured, run-on sentence. Unclear.	Accepted
NADAI (CIRED)	11	40	25	-	-	-	-	-	Refer to table 1 and 2.	Accepted
Praessler (PIK)	11	40	1	-	-	11.5.1.3	-	-	"Section ""lessons learned from R&D"" does not contain a structured overview of lessons learned. Rather than yet two more examples, 5 high-level learnings would be more helpful here. What distinguishes effective R&D support from ineffective? What are the key success factors?"	NEEDS TO BE FURTHER DEVELOPED; WHO CAN DO THIS?

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kimura (Central Research Institute of Electric Power Industry)	11	40	-	-	-	11.5.1.3	-	-	"Too little papers are reviewed despite a number of important empirical analyses in the world. Representative papers such as Wind energy R&D experience in US (Loiter and Norberg-Bohm 1999), PV R&D experience in US (Margolis 2002), PV R&D in Germany (Jacobsson & Lauber 2006), PV R&D in Japan (Kimura and Suzuki, 2006) should be at least reviewed here. See: Loiter, J., Norberg-Bohm, V., 1999, Technology policy and renewable energy: public roles in the development of new energy technologies, Energy Policy, 27, pp.85-97. Margolis, R., 2002, Understanding Technological Innovation in the Energy Sector: The Case of Photovoltaics, The Woodrow Wilson School of Public and International Affairs, Princeton University. Jacobsson, S., Lauber, V., 2006, The politics and policy of energy system transformation: explaining the German diffusion of renewable energy technology, Energy Policy, 34, pp.256-276. Kimura, O., Suzuki, T., 2006, 30 years of solar energy development in Japan: co-evolution process of technology, policies, and the market, Berlin Conference on the Human Dimensions of Global Environmental Change, November 2006, Berlin. http://userpage.fu-berlin.de/ffu/akumwelt/bc2006/papers/Kimura_Suzuki.pdf"	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	40	-	-	-	11.5.1.3	-	-	Fails to mention how and why focus on scale rather than reliability detracted from results of U.S. investment into RE. Section is conclusory.	ANALYSIS NEEDS TO BE DEVELOPED FURTHER
Soliano Pereira (Universidade Salvador - UNIFACS)	11	40	1	-	-	11.5.1.3	-	-	Very poor with just one example. It needs to be better elaborated.	Accepted
Hamilton (Chatham House)	11	40	17	-	-	11.5.2	-	-	"This section could do with shortening and being more focused; there are other incentives than feed-in tariffs and quotas (the latter has different designs as well), including the use of investment and production tax credits (tax equity) in the US (11.5.2.2 gives this very little attention compared to the more European debate over FiTs/Quotas); and auctioning in various Latin American countries. Reference to e.g. DB's work on feed-in; and my own evidence-based work from the finance community on 'feed-in vs renewables obligation' debate (in 'Unlocking Finance' paper, December 2009). The important point is that if there is high risk in other facets of 'energy policy' - including eg grid access (or availability in the case of offshore wind, or biofuels) then investors may find the overall equation unattractive. Policies for deployment thus are infact wider energy policy rather than simply technology+incentive. This is why the strategic planning element raised in Ch8 is so important, and associated regulations and the energy system aspect of policy needs considerably stronger focus, or else clarify the difference between technology policy and energy policy and why the latter is importnat in another section."	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hongo (Japan Bank for International Cooperation)	11	40	26	-	-	11.5.2	-	-	Market failure' may be happened but it is difficult to say whether exactly occurred or not. So condition should be added, like □market failure will be there when external cost can not be properly included it□. But this comment does not mean to deny the role of RE	Accepted
Mu�oz (Pardee Center, Boston University)	11	41	4	-	-	-	-	-	"""feed laws"" should be ""feed-in laws"""	Accepted
Mu�oz (Pardee Center, Boston University)	11	41	15	41	16	-	-	-	"""tehc costs are covered"" should be ""the costs can be covered"" There are many ways of funding the premium."	Accepted
Klessmann (Ecofys Germany)	11	41	18	-	-	-	-	-	"replace ""major useres"" with ""energy-intensive industry"""	Accepted
Klessmann (Ecofys Germany)	11	41	22	-	-	-	-	-	2002 is not a good date of comparison (a new FIT law was introduced in 2000)	Accepted
Garcia (Renewable Energy Center)	11	41	3	-	-	-	-	-	It is possible to put a number of countries with FIT policies? And to compare this number with the number of other policies?	COVERED TO SOME EXTENT IN 11.2
Klessmann (Ecofys Germany)	11	41	15	-	-	-	-	-	quote additional sources, e.g. Ragwitz et al. 2007 (see above), Klessmann et al. 2008 (Klessmann, C., Nabe, Ch., Burges, K., 2008. Pros and cons of exposing renewables to electricity market risks□A comparison of the market integration approaches in Germany, Spain, and the UK. Energy Policy 36 (2008) 3646-3661.)	Accepted
Mu�oz (Pardee Center, Boston University)	11	41	19	41	20	-	-	-	this sentence is incorrect. The US has most significant growth and no FIT. Need to find different way of saying FITs are very successful.	WILL ADDRESS
Kessels (International Energy Agency Clean Coal Centre)	11	41	19	41	19	-	-	-	Would be good to have an example of a failure of feed in tariffs and the reasons behind the failure and how other systems address these problems	Accepted
de Haan (Ernst Basler + Partner AG)	11	41	-	-	-	11.5.2	-	-	Section 11.5.2 has a deeped level of detail than other sections. Most of the potential to shorten section 11 seems to be allocated to section 11.5.2. Many of its sub-sections contain textbook-like definitions and descriptions that are not necessarily required for the SSREN report.	Accepted
Yamaguchi (The Institute of Energy Economics, Japan)	11	41	-	-	-	11.5.2	-	-	The concept of FIT and RPS(RO) in other public policy like those of agriculture might better be introduced so that these concepts are not only for RE policies	WILL CONSIDER, BUT GOES BEYOND MANDATE
Mu�oz (Pardee Center, Boston University)	11	41	2	-	-	11.5.2.1.1	-	-	Is missing the feed-in component (grid access). Without the feed-in, a Feed-in tariff is not a feed-in tariff but a fixed tariff.	Accepted
Klessmann (Ecofys Germany)	11	41	2	-	-	11.5.2.1.1	-	-	The different implication of fixed and premium FIT should be explained	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Pugh (U.S. Department of Energy)	11	41	2	43	41	11.5.2.1.1	-	-	This section and the two that follow are not complete without a discussion of the pitfalls of poor design, notably the crash in Spain's solar industry that was the result of an unsustainable tariff structure: http://www.nytimes.com/gwire/2009/08/18/18greenwire-spains-solar-market-crash-offers-a-cautionary-88308.html Referring to Spain as a success without reference to the negative repercussions of poor design does not fully inform the policy discussion.	Accepted
Praessler (PIK)	11	41	2	-	-	11.5.2.1.1	-	-	Well-structured section with good citations	Accepted
Nilsson (Lund University)	11	41	2	-	-	11.5.2.1.1.	-	-	In my view, FIT:s are not always entirely flawless. Note also problems or side-effects for balance.	Accepted
Tagashira (Central Research Institute of Electric Power Industry)	11	41	1	-	-	5.2.1	-	-	One of the issues on FIT design is a degression rate. The author should refer to a new approach for PV and its result in Germany, in which the rate varies with annual achieved capacity.	Accepted
Mu&#65533;oz (Pardee Center, Boston University)	11	42	-	-	-	-	10	-	can figure 9 and 10 be merged? If not, fig 10 does not add that much, shoudl be replaced by one of a country with greater penetration such as Spain or Denmark.	might omit figure 10 or move elsewhere
Mu&#65533;oz (Pardee Center, Boston University)	11	42	-	-	-	-	9	-	can figure 9 and 10 be merged? If not, fig 10 does not add that much, shoudl be replaced by one of a country with greater penetration such as Spain or Denmark.	Accepted
Tagashira (Central Research Institute of Electric Power Industry)	11	42	-	-	-	-	9	-	To help readers understand increase in a RES-E share, the author may add a line graph showing a share of electricity from RE.	Accepted
NADAI (CIRED)	11	42	-	-	-	-	-	9	Primary and final energy consumption, shall be defined in the SRREN glossary terms	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	43	7	43	8	-	-	-	"Bad sentence. ""It does come down to are not necessarily enough to increase renewable 8 deployment (Commission of the European Communities, 2008; Fouquet and Johansson, 2008)"""	Accepted
Klessmann (Ecofys Germany)	11	43	30	-	-	-	-	-	"more clear: ""priority purchase of RES electricity"""	Accepted
Fulton (Deutsche Bank)	11	43	33	-	-	-	-	-	"The importance of price discovery in the degression of a feed-in tariff is crucial to maintain public policy support; this is not emphasized enough. Source: DBCCA, ""DRAFT: Strategic Power Delivery System Analysis: Overcoming Intermittent Renewable Energy Barriers to Scale,"" see pages 18, 19 (Report to be published in 1Q 2010). See SRREN_Draft0_Review_Fulton_Mark_Material_01.pdf"	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
NADAI (CIRED)	11	43	41	43	41	-	-	-	"This is a problematic sentence as in most european policy documents, administrative procedures are not distinguished enough form useful planning procedurress or processes, and that the idea of a hierachical process made up of preplainning + streamlined authorisation proceudres woudl work. evidence in wind power plainning show that the issue is more complex than this , see for instance : Ellis, Geraint, Cowell, Richard, Warren, Charles, Strachan, Peter, Szarka, Joseph, Hadwin, Richard, Miner, Paul, Wolsink, Maarten and Nada□ Alain(2009) 'Wind Power: Is There A 'Planning Problem□?Expanding Wind Power: A Problem of Planning, or of Perception?The Problems Of Planning□A Developer's PerspectiveWind Farms: More Respectful and Open Debate Needed, Not LessPlanning: Problem 'Carrier□ or Problem 'Source□?'Innovative□ Wind Power Planning', Planning Theory & Practice, 10: 4, 521 □ 547 .... may be it coudl be adeed ""Taking into account the fact that land planning in some situation is part of the construction of Re potential and deployment. """	Accepted
NADAI (CIRED)	11	43	7	43	8	-	-	-	I do not understand the sentence (typo?)	Accepted
Tagashira (Central Research Institute of Electric Power Industry)	11	43	12	-	-	-	-	-	Luthi and Wustenhagen(2009a and 2009b) are not listed in the reference list.	WILL ADD TO REF. LIST
Klessmann (Ecofys Germany)	11	43	7	-	8	-	-	-	sentence incomplete / not understandable	Accepted
NADAI (CIRED)	11	43	1	43	4	-	-	-	Would be good to cite some examples of sucessful minigrid experience here.	Accepted
NADAI (CIRED)	11	43	36	43	36	-	-	-	Would bring this in line 31,as it is a very important point, even if the list is not from most most important to least important.	Accepted
Tagashira (Central Research Institute of Electric Power Industry)	11	44	33	-	-	-	-	-	"In the UK, the buy-out system is introduced; thus targets are not achieved per se. I recommend referring to the difference between quota systems here. "	Accepted
Tagashira (Central Research Institute of Electric Power Industry)	11	44	8	-	-	-	-	-	A description on who must meet obligations (generators, suppliers, customers, etc.) is needed, even if there is a explanation of who trade certificates in line 16.	Accepted
Nilsson (Lund University)	11	44	33	-	-	-	-	-	I was pretty sure that production targets have been met in Sweden. Please double check.	will check and/or omit
Klessmann (Ecofys Germany)	11	44	21	-	-	-	-	-	tender systems are generally not considered quota systems	Accepted
Nilsson (Lund University)	11	44	1	-	-	11.5.2.1.2	-	-	"Is the GO:debate/issue worth mention? Interesting from a policy perspective (see e.g., paper by Nilsson, Nilsson and Ericsson in Energy Policy 2009, ""The rise and fall of GO..."")"	WILL LOOK INTO THIS AND REVIEW REF. NOTED
Tagashira (Central Research Institute of Electric Power Industry)	11	44	1	-	-	5.2.1.2	-	-	Under quota systems, the enabling market is also important as described in page 43 line 6 on FITs. Similar explanations are required in this section.	accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
McCormick (International Union for Conservation of Nature (IUCN))	11	45	27	45	30	-	-	-	"Error. ""_____-implemented"""	unclear
McCormick (International Union for Conservation of Nature (IUCN))	11	45	10	45	11	-	-	-	"Parentheses or hypenation should be used. ""□and to a lesser extent, the United States□"""	WILL CONSIDER AS REDRAFT
McCormick (International Union for Conservation of Nature (IUCN))	11	45	33	45	34	-	-	-	"use ""... - from a variety of technologies - ..."	WILL ADDRESS IF CAN DECIPHER MEANING OF COMMENT
McCormick (International Union for Conservation of Nature (IUCN))	11	45	35	45	36	-	-	-	"Use ""FITs"" instead of ""they."" Re-state the subject of the sentence to make sure ""countries"" is not confused as the subject."	Accepted
Philibert (International Energy Agecy)	11	45	27	45	32	-	-	-	The IEA analysis (as referenced in IEA, 2008a) does not state that FITs are the most efficient and effective support policies for promoting renewable electricity. Instead, policies, such as FITs, but also e.g. technology-banded tradable green certificate system, can be effective if they follow key policy design principles.	Accepted
Dunn (GE Energy)	11	45	9	-	-	11.5.2.1.3	-	-	"As discussed during the expert review meeting, the FIT-RPS debate should be shortened as it veers on the prescriptive and has to some extent been overtaken by events (you see elements of both in Europe, US, and China). Suggest focusing on relative pros and cons, lessons learned, and case studies (i.e. Spain FIT cap shows risks of setting price too high; US RPS success varies widely depending on the details). There should be ample literature on Spain's recent experience. On the RPS, see various NREL/LBL studies and SRREN_Draft1_Review_Dunn_Seth_Material_10.pdf."	Accepted
Mu�oz (Pardee Center, Boston University)	11	45	-	-	-	11.5.2.1.3	-	-	This section can be shortened, even though is dear to most of us in the field. Since it seems to basically say that FITs are superior than QUoTAS on most counts, there is no need for so many subsections (or so detailed).	Accepted
de Haan (Ernst Basler + Partner AG)	11	45	-	-	-	11.5.2.1.3	-	-	This subsection should be shortened. If possible, sixth-level headings 11.5.2.1.3.1 to 11.5.2.1.3.6 should be omitted and their content shortened. This is far too detailed for the topic at stake in the context of the SSREN report.	Accepted
Londo (Energy research Centre of the Netherlands)	11	45	23	46	15	11.5.2.1.3.1	-	-	In parallel to the next section ('risk minimisation', which in fact deals with investor's risk), one could in this section also discuss the risk of not meeting a (policy) target. By definition, this risk is modest in a quota system (as long as some requirements, such as an adequate penalty, are met), and higher in a FIT system (particularly when it's open-end). in my view a FIT lies more uncertainty with the policy maker, while a quota system lies more uncertainty with the investor. The question is then whoe can deal best with it.	WILL COVER IF FIND IN LITERATURE

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Praessler (PIK)	11	45	22	-	-	11.5.2.1.3.1	-	-	Well written. I would include a remark on static vs. dynamic / Intertemporal efficiency. One argument for technology discriminating FIT and against (present) cost-optimizing quota systems is that in the end we will need all technologies to decarbonize the power sector. Hence it makes sense to promote employment of higher costs options even now in order to drive them down the learning curve. This makes it cheaper over the long run than to first deploy wind and biomass and then start to develop higher cost options later / too late. See OPTRES report and Haas for references.	Accepted
Londo (Energy research Centre of the Netherlands)	11	45	9	51	8	11.5.4.1.3	-	-	The section and its subsections contain a wide body of literature and other material discussing and comparing FITs and quota systems. On their contents, I can hardly criticize anything. However, I do think some summarising and concluding statements would be most useful (they could even replace the many short paragraphs discussion specific literature sources, or these could be sent to an annex).	WILL SHORTEN SIGNIFICANTLY
Tagashira (Central Research Institute of Electric Power Industry)	11	45	22	-	-	5.2.1.3.1	-	-	"Although descriptions on the US's RPSs are seen in other sections, such as 11.5.2.1.3.2 in page 46 line 43 saying ""the effectiveness of quota systems can be high under well-designed policies"", this section should cover that contents. "	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	46	27	46	41	-	-	-	Multiple run-on sentences.	WILL EDIT
Brunner (PIK)	11	47	40	-	44	-	-	-	I am not sure whether the comparison between premiums for wind in Germany and the UK is entirely fair. To my (admittedly limited) knowledge, the UK premium also covers grid connection cost whereas the German FIT only covers generation cost. Maybe check.	WILL LOOK INTO THIS
Tagashira (Central Research Institute of Electric Power Industry)	11	47	32	48	3	-	-	-	The premium levels are influenced by not only policies (FIT vs RPS) but also planning delays or grid matters. Explanations of them are required here.	WILL MENTION BRIEFLY AND REFER TO 11.6
Praessler (PIK)	11	47	11	-	-	11.5.2.1.3.3	-	-	"Missing analyses that would be good to cover: - Total cost analysis and optimal timing for abolishion of support systems - How to fade out support for RET with best possible integration of RET into existing energy markets; as of now still stand alone protected support environment"	will be addressed.
Klessmann (Ecofys Germany)	11	47	28	-	-	11.5.2.1.3.3.	-	-	"Higher profits under quota systems are justified by the higher risk; they are thus not excess(ive) profits. But: excess profits for low-cost technologies occur in technology-neutral quota systems (and other technology-neutral support schemes). see e.g. Ragwitz et al. 2007. The importance of technology-specifcation for the efficiency of support should be mentioned in this section. "	WILL REVIEW ARTICLE NOTED

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Tagashira (Central Research Institute of Electric Power Industry)	11	47	11	-	-	5.2.1 .3.3	-	-	"I recommend to quote ""Implementation of EU 2020 Renewable Target in the UK Electricity Sector:Renewable Support Schemes"" by Redpoint Energy (2008), which shows the estimated cost of a FIT is slightly lower than that of the Renewables Obligation(RO)."	we think this is probbaly a bit too detailed but we accept your point
Klessmann (Ecofys Germany)	11	48	13	-	-	-	-	-	also quote de Jager and Rathmann 2008 here	Accepted
Nilsson (Lund University)	11	48	38	-	-	-	-	-	Is it good or bad that Germany has 42% of connected capacity?	will clarify our meaning
Tagashira (Central Research Institute of Electric Power Industry)	11	48	20	-	-	5.2.1 .3.4	-	-	A description on multiple certificate approach for quota systems such as the RO in the UK is required in this section.	Accepted
Klessmann (Ecofys Germany)	11	49	25	-	26	-	-	-	"Explain why premium options attracts mostly incumbent power generators: electricity market risk is higher for IPPs; should already be mentioned in 11.5..1.1"	will clarify
Pehnt (Institute for Energy and Environmental Research)	11	49	-	-	-	-	-	-	"Include in this section that certain performance/quality standards should be incorporated into FIT and quota systems. For instance, Germany has introduced requirements regarding the sustainability of the biomass resources in the ""sustainability ordinance"" which is a prerequisite for receiving the FIT; or efficiency requirements for biogas processing to avoid systems with a negative GHG balance. If you need further information on this issue, I can provide literature/text. See also SRREN_Draft0_Review_Pehnt_Martin_Material_04.pdf, page 32 ff"	WILL ADDRESS HERE OR EARLIER IN SECTION
Nilsson (Lund University)	11	49	11	-	-	-	-	-	I think it is unfortunate to confuse quota systems with tendering systems (that create cycles). Perhaps a stricter taxonomy of ways of supporting RES is in order?	will clarify
Garcia (Renewable Energy Center)	11	49	25	49	31	-	-	-	In this paragraph, the last statement is contradictory with the first.	will clarify
NADAI (CIRED)	11	50	10	50	15	-	-	-	" A paper by dave Tolke provides figures that contradicts this statement. Toke, Dave. 2005. Are green electricity certificates the way forward for renewable energy? ... Environment & Planning C: Government & Policy 23, 3: 375-97. Shows in this paper that: . financial returns are Higher under UK RO than German FIT . that 'cultural factors are a bigger influence on the patterns of ownership of widn power schemes than whether procurement systems are market based or fixed price. "	will take into consideration AS WE REDRAFT
McCormick (International Union for Conservation of Nature (IUCN))	11	50	21	50	22	-	-	-	"Change to ""In other words, it is argued that determining which policy mechanism is most appropriate depends on the level of maturity of the technology in question.""""	this point is included as part of the general review
Tagashira (Central Research Institute of Electric Power Industry)	11	50	29	-	-	-	-	-	A description on multiple certificate approach for quota systems is also needed near this line.	this is included if by multiple certificate system you mean banding

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
McCormick (International Union for Conservation of Nature (IUCN))	11	50	34	50	40	-	-	-	Try a bulleted list?	WILL CONSIDER
Kimura (Central Research Institute of Electric Power Industry)	11	51	13	-	19	-	-	-	"Experience of Japan, one of the largest PV markets in the world, should be added. Japan uses investment subsidy with net metering as the major tools to stimulate PV diffusion (Kimura and Suzuki, 2006). The impact has been very clear i.e. Japanese PV market has been strongly affected by the governmental investment subsidy program. See: Kimura, O., Suzuki, T., 2006, 30 years of solar energy development in Japan: co-evolution process of technology, policies, and the market, Berlin Conference on the Human Dimensions of Global Environmental Change, November 2006, Berlin. http://userpage.fu-berlin.de/ffu/akumwelt/bc2006/papers/Kimura_Suzuki.pdf"	Accepted
Kimura (Central Research Institute of Electric Power Industry)	11	51	15	-	18	-	-	-	"Japanese experience with net metering should be refereed to in the sentence. Net metering has also been a major tool to stimulate PV diffusion in Japan, one of the largest PV markets in the world (Kimura and Suzuki, 2006). See: Kimura, O., Suzuki, T., 2006, 30 years of solar energy development in Japan: co-evolution process of technology, policies, and the market, Berlin Conference on the Human Dimensions of Global Environmental Change, November 2006, Berlin. http://userpage.fu-berlin.de/ffu/akumwelt/bc2006/papers/Kimura_Suzuki.pdf"	Accepted
Hamilton (Chatham House)	11	51	9	-	-	11.5.2.1.4	-	-	This might fit better under 11.5.2.3	will be moved
NADAI (CIRED)	11	51	9	-	-	11.5.2.4.1 (SHOULD BE 11.5.2.1.4)	-	-	This section remains a bit technical, lisitng pros and cons, performance factors. Is'nt teher a broader issue with decentralised genertion and net metering, which in some countries woudl mean a structrual shift in the energy system. What is the potential of net metering, the resistance to it ... is 'nt ther a lietrtaure on this ?	section will be restructured
Tagashira (Central Research Institute of Electric Power Industry)	11	51	9	-	-	5.2.1.4	-	-	I recommend referring to net metering system in Japan in this section, because it is taken as a good example of the system in another section on fiscal incentives.	thanks for the recommendation. We will consider this as we revise.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
NADAI (CIRED)	11	52	28	52	31	-	-	-	"It is also that the US 80's experience with wind power has pushed industry to scale up to fast, on technologies that were not stabilised, and then failed (cf. papers by Bolinger 2005:560 ; M.A. Bolinger / Making European-style community wind power development work in the US, Renewable and Sustainable Energy Reviews 9 (2005) 556-575) ""The presence of a strong domestic wind turbine manufacturing industry has been an important driver in Denmark, where, in the early years of modern wind power development, turbine manufacturers often sent sales representatives out into the countryside to organize and facilitate community wind projects, with the ultimate objective of consummating turbine sales. Through this sales strategy, Danish wind turbine manufacturers co-evolved with the market for their product. In other words, by steadily filling orders for just a few turbines at a time, as opposed to hundreds or thousands of turbines destined for large California wind farms, Danish turbine manufacturers were able to test new products and discover and solve technical problems prior to mass production [3]. This is in contrast to the experience of Kenetech in the US, which became insolvent at least in part because of a premature push□stimulated by thousand-turbine orders□into mass production of largely un-tested wind turbine technology [4]""(Bolinger 2005:560)"	WILL ADDRESS SOMEWHERE IN CHAPTER
NADAI (CIRED)	11	52	1	52	2	-	-	-	please explain	Accepted
Klessmann (Ecofys Germany)	11	52	3	-	-	11.5.2.2	-	-	Here fiscal incentives include subsidies, while section 11.5.3.1 differentiates fiscal and financial incentives	WILL CONSIDER
Klessmann (Ecofys Germany)	11	53	37	-	-	-	-	-	In Europe it is generally not allowed to subsidze production from the state budget (state aid rules)	CAN TRY TO ADJUST LANGUAGE TO AVOID TERM "SUBSIDIZE"
Garcia (Renewable Energy Center)	11	54	40	54	42	-	-	-	"May I suggest the following wording: """"Smoothing the effects of the variability can be improved through: aggregation, use of smart grids, forecsting and integration in the market """"	Accepted
Mu&#xFFFD;oz (Pardee Center, Boston University)	11	54	14	54	16	-	-	-	"This should go into the def of feed-in tariff. Additionally, I disagree with the ""but not always"". If there is no grid access, is not a feed-in tariff, but a fixed tariff."	Accepted
Tagashira (Central Research Institute of Electric Power Industry)	11	54	23	-	-	-	-	-	Baker et al, 2009. Reference missing.	WILL ADD TO REF. LIST

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kessels (International Energy Agency Clean Coal Centre)	11	54	33	55	12	-	-	-	Covered in another chapter so can be deleted	WILL CONSIDER SHORTENING AND REFERRING TO PREVIOUS CHAPTER
Hamilton (Chatham House)	11	54	1	-	-	11.5.2.3	-	-	This is an important section and does need to be better cross referenced with 'technology deployment', as per comment above. Particularly as policymakers may read this chapter as a stand-alone.	will work with chapter 8
Sawyer (Global Wind Energy Council)	11	54	7	-	-	11.5.2.3.1	-	-	"There is an extra ""."" in the middle os the line"	Accepted
Klessmann (Ecofys Germany)	11	54	5	-	-	11.5.2.3.1	-	-	"This section is not very precise and contains some misunderstandings: The EU directive 2001/77/EC does not require ""priority grid access"" for RE, only guaranteed transmission and distribution. MS ""may"" provide for priority grid access. The section should differentiate between grid access and disptach of electricity. "	Accepted
Hamilton (Chatham House)	11	54	6	54	10	11.5.2.3.1	-	-	Add here that the consequence of the need for connection is the sequencing of energy policy and regulatory decisions needs to ensure that the delivery infrastructure is actually there, e.g. in the case of offshore wind, or plug-in points in the case of electric vehicles (I know about the former, and am assuming the latter). This needs to link with 11.5.5.2 Policies to Finance Deployment and Infrastructure as essentially this is covering overlapping ground (but I won't make the same comment against the latter section). The access to the grid is well-covered in this section.	Accepted
NADAI (CIRED)	11	54	-	-	-	11.5.2.3.1	-	-	Shall the issue of who pays the connection to the grid (for instance bewteen a wind farm and the grid) be adressed in this subsection?	will be addressed in 11.5 and checked with chapter 8.
Sawyer (Global Wind Energy Council)	11	54	29	-	-	11.5.2.3.1	-	-	There is no year after the reference in the bracket	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	55	31	-	-	-	-	-	"In 2003, Brazilian Regulatory Agence enacted a regulatory resolution allowing concessionaires to use renewable home systems to comply their obligations to provide full coverage. In certain states, private concessionaires proved those systems to be the most cost-effective alternative. Reference: Reference: PEREIRA, O. et al: ""PV Comes to the Mainstream: 30.000 SHS Installed by Utility in Brazil under a New Distribution Planning Model. In: 21st European Photovoltaic Solar Energy Conference, 2006, Dresden. Proceedings of the International Conference held in Dresden, Germany 4-8 September 2006, p. 2927-2932"	WILL CONSIDER WHEN REDRAFTING
Kessels (International Energy Agency Clean Coal Centre)	11	55	32	60	22	-	-	-	Aside from Canada and Japan mentioned these sections are Euro focused. I suggest to reduce the amount of information to just illustrate RES H/C with some examples and the pros and cons of them.	WILL INCLUDE EXAMPLES FROM MORE COUNTRIES/REGIONS IF POSSIBLE, OR PROVIDE MORE PROS/CONS
NADAI (CIRED)	11	55	2	55	3	-	-	-	If mentioend it has to be explaind what these centers achieve.	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Pehnt (Institute for Energy and Environmental Research)	11	55	-	-	-	-	-	-	Include further activities to integrate RES electr, such as the time-dependent FIT in Slovenia (low/high tariff) or the activities of an integration bonus in Germany that was supposed to especially support RES generators including demand oriented production (via load management, storage or coupling with biogas plants)	accepted
Sawyer (Global Wind Energy Council)	11	55	29	55	31	11.5.2.3.2	-	-	"In line 31, ""seats"" is not clearly defined. Please explain more specificly."	Accepted
Klessmann (Ecofys Germany)	11	55	13	-	-	11.5.2.4	-	-	Add some information on (subsidised) micro-credits as a policy tool	IN GENERAL, NEED MORE REF.S AND EXAMPLES OF RURAL/OFF-GRID POLICIES AND EXPERIENCES. WHO CAN DO THIS?
NADAI (CIRED)	11	55	13	-	-	11.5.2.4	-	-	This is too short as compared to the importance of the issue in the reality. Same as remark 18 above. Can we fidn more competence and references, examples on this?	Accepted
NADAI (CIRED)	11	55	32	-	-	11.5.3.	-	-	Nohting on buildgin codes here?	About 2 pages related to building codes in draft (see pp. 58-59)
Langniss (Fichtner KG)	11	55	32	-	-	5.3	-	-	This section needs more different references. Much is referred to B□rger's work. Possibly a literature review might help	Accepted
Garcia (Renewable Energy Center)	11	56	11	56	14	-	-	-	"Add ""tax credits"" among the policies to promote renewable heat."	accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	56	21	-	-	-	-	-	Include in the text: Among fiscal instruments are tax-credits, reductions and exemptions and accelerated depreciation.	WILL ADD HERE AND TO TABLE 2
NADAI (CIRED)	11	56	38	-	39	-	-	-	unclear, please explain if mentioned.	will do so
Klessmann (Ecofys Germany)	11	57	22	-	23	-	-	-	"Not true; change to ""Germany also considered a bonus mechanism for RES-H, but finally decided for a RES-H use obligation for new buildings."""	will edit to clarify
Tagashira (Central Research Institute of Electric Power Industry)	11	57	25	-	-	-	-	-	"Part of Issues on the number of heat generators apply to RPS or FIT policies supporting residential PV generators; but they are operating in several countries. Issues on the number of heat generators are troublesome but not critical. "	already stated in section
Klessmann (Ecofys Germany)	11	57	15	-	18	-	-	-	"The sentence ""The comparative usefulness□"" just repeats what has been said earlier and could be left out"	will edit to clarify
Pehnt (Institute for Energy and Environmental Research)	11	57	22	-	-	-	-	-	Not legal issues prevented the bonus model, but political considerations (extra costs for final customers etc.) Instead there is a legal obligation for using a certain share of RE heat in new buildings.	thanks for this information.
NADAI (CIRED)	11	57	11	57	18	-	-	-	This is abit redundant with 115213, might be shortened just sayin the evidence is alike the one for electricity generation ?	will think about this
Nilsson (Lund University)	11	57	1	-	-	11.5.3.1.2	-	-	I thought Poland had a quota system for heat but maybe it was just talk (please check). Doesn□t UK have some system that gives bonus for energy crop fuel?	WILL LOOK INTO THIS

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hongo (Japan Bank for International Cooperation)	11	57	-	-	-	11.5.3.1.3	-	-	It seems that 'financing' focus on RE projects in industrialized countries but much bigger demand for funding is expected in developing countries including China. According to WEO2009 of IEA, □OECD+□ requires USD 212billion but total of □Other major economies□ and □others□ require USD353 billion in 2020 respectively. For scaling up financing to developing countries mobilization of private financing is important. This strategy was Accepted or seems to be Accepted at COP15, by using terminology like Public Private Financing.	will edit to clarify
Tagashira (Central Research Institute of Electric Power Industry)	11	57	1	-	-	5.3.1.2	-	-	Some quota systems for electricity, such as Australian quota system (MRET), include solar hot water systems as eligible sources for certificates. I recommend to add a description on that fact in this section.	have done so
Klessmann (Ecofys Germany)	11	58	35	-	-	-	-	-	"""can go as far as"" sounds very negative/extreme; in fact, the instrument has been very effective and well Accepted in some municipalities "	will edit
NADAI (CIRED)	11	58	16	-	26	-	-	-	same remark than 48.	will be discussed with commenter.
Nilsson (Lund University)	11	58	1	-	-	11.5.3.1.4	-	-	Sweden□s fuel switch to bioenergy has been nearly entirely driven by high CO2 tax	already stated in section
NADAI (CIRED)	11	59	-	59	-	-	-	-	a table would be nice to sum up the content of this page	WILL CONSIDER
NADAI (CIRED)	11	60	2	60	2	-	-	-	case study box missing	BOXES CURRENTLY AT END OF CHAPTER
Soliano Pereira (Universidade Salvador - UNIFACS)	11	60	33	-	-	-	-	-	Include a phrase on flex fuel cars: Reduced taxes on flex fuels cars, runnning with combination from 100% ethanol to 100% gasoline, made these vehicles account for 73% new cars sales in 18 months (Reference: A Blueprint for Green Energy in the Americas Strategic Analysis of Opportunities for Brazil and the Hemisphere Featuring: The Global Biofuels Outlook 2007. Prepared for the Inter-American Development Bank by Garten Rothkopf).	WILL CONSIDER ADDING TEXT ON FLEX-FUEL/ALTERNATIVE VEHICLES
Yamaguchi (The Institute of Energy Economics, Japan)	11	60	-	-	-	11.5.4	-	-	"IEA RETD's new study ""Renewable Energy for Transportation(RETRANS)""can also be cited after its completion."	WILL INCLUDE IF COMPLETED IN TIME.
Yamaguchi (The Institute of Energy Economics, Japan)	11	60	-	-	-	11.5.4	-	-	May need the description of the difference in policy focus between chapter 2 and 11.	Yes, will add intro to section to this effect. Also a X-CUT ISSUE; THIS APPLIES TO ALL TECHNOLOGIES. STATE UPFRONT THAT THIS CHAPTER COVERS MORE GENERAL ISSUES, WHILE TECHNOLOGY SPECIFIC ARE IN TECH. CHAPTERS?

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Soliano Pereira (Universidade Salvador - UNIFACS)	11	61	37	-	-	-	-	-	"Ethanol is blended to gasoline on a average 23%, but the range is between 20 to 25% according to the sugarcane production. In the case of diesel, the mandatory blending with biodiesel is 5%, by 2010. Two references: Suani Teixeira Coelho, Jos□oldemberg, Oswaldo Lucon and Patricia Guardabassi. 2006. ""Brazilian sugarcane ethanol: lessons learned"". Energy for Sustainable Development. Volume 10, Issue 2, June 2006, Pages 26-39. A Blueprint for Green Energy in the Americas Strategic Analysis of Opportunities for Brazil and the Hemisphere Featuring: The Global Biofuels Outlook 2007. Prepared for the Inter-American Development Bank by Garten Rothkopf"	yes will review references
Kessels (International Energy Agency Clean Coal Centre)	11	61	9	61	15	-	-	-	Tietenberg is a good reference for taxes there is also the problem of what to set the tax rate at, who collects and enforces it and politically who has control of the tax revenue and how it is spent	WILL CONSIDER; WILL LOOK AT REF. NOTED.
Heinrich (Instituto Meteorologico Nacional)	11	61	1	-	-	11.5.4.1.1	-	-	Could include the example of Costa Rica's taxation on fossil fuel use to support payment for environmental services (forest conservation and restoration).	WILL CONSIDER
Rosinski (Electric Power Research Institute)	11	62	21	62	35	-	-	-	"Examples provided under 11.5.4.1.4 ""Sustainability Standards"" are excellent."	thank you….
Pugh (U.S. Department of Energy)	11	62	32	62	35	-	-	-	This should probably now refer to the recently signed Renewable Fuel Standard 2 regulation: http://www.epa.gov/oms/renewablefuels/index.htm#regulations	WILL CONSIDER
Nilsson (Lund University)	11	62	15	-	-	11.5.4.1.4	-	-	Can you really avoid the whole debate on direct/indirect land-use effects here?	This should be covered either in technology chapters or chapter 9 via case studies and analysis. However, we will cover policies to ensure that RE is developed in a sustainable manner via standards and regulations. Land and marine spatial planning is covered in ch 11.
Hongo (Japan Bank for International Cooperation)	11	62	22	62	23	11.5.4.1.4	-	-	It is better to redefine □Sustainability Standards□ used at this report. It is introduced that only EU has Sustainable Standard and in other line 'habitat conservation, water and air pollution' are introduced as examples in addition to □land use conflict□. It seems that 'habitat conservation, water and air pollution' are, in many countries, regulatory requirements and also are included as a part of environment guideline like JBIC, World Bank and so on. I am afraid that the additional criteria or standard necessary for bio fuels is, in many cases, energy efficiency related to conflict with agriculture and food.	Accepted
Klessmann (Ecofys Germany)	11	62	15	-	-	11.5.4.1.4	-	-	mention unresolved issue of indirect land-use changes	This should be covered either in technology chapters or chapter 9 via case studies and analysis. However, we will cover policies to ensure that RE is developed in a sustainable manner via standards and regulations. Land and marine spatial planning is covered in ch 11.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	63	1	-	-	11.5.4.1.5	-	-	"One of the complexities of financing biofuel production facilities (and in a different way biomass) is the lack of correlation between the feedstock side of the equation and the retail or fuel side. In other words a company must buy biomass 'fuel' but cannot pass through the cost of that as the retail side has its own market dynamics and the sale of fuel must be able to compete in that market. This means that issues like trade policy around import of feedstock or fuels; or policies/subsidies in other another country which might affect the competitiveness of imported products, are also very important. This is briefly described in Unlocking Finance for Clean Energy paper, Chatham House, December 2009."	Accepted
Nilsson (Lund University)	11	63	31	-	-	11.5.5	-	-	"Should green labelling and voluntary actions also be mentioned? Overall I think the chapter is strong on financing issues but weaker on ""indirect policy.""""	Accepted
Tagashira (Central Research Institute of Electric Power Industry)	11	63	35	-	-	5.5.1	-	-	This section is important. However, if chapter 10 must be reduced by 23 pages, this section might be a candidate for a cut.	WILL CONSIDER
NADAI (CIRED)	11	64	17	-	-	-	-	-	11.2 instead of 11.5	Accepted
Sawyer (Global Wind Energy Council)	11	64	4	-	-	11.5.5	-	-	"Reference missing after ""units produced"""	Accepted
Londo (Energy research Centre of the Netherlands)	11	64	1	64	6	11.5.5.1	-	-	Technological learning is mentioned and discussed in many places in the report. Principally, all measures aiming at deployment of a RE technology try to 'ride down the learning curve'. It's a bit far-fetched to discuss this (with an illustration) in the public procurement section only.	will be revised
Hamilton (Chatham House)	11	64	15	-	-	11.5.5.2	-	-	"This section seems to be about the role of government/public financing, whereas this would be more relevant to the subsequent section (11.5.5.2.1). In this section it may be useful to define what is meant by infrastructure (i.e. is it RE power plants, or just the delivery infra - transmission/wiring/pipes; if it does including grid connected plant, then what is meant by deployment) and outline more fully issues around financing and regulation (including different ways that governments are choosing to approach this."	Accepted
Paredes (Inter-American Development Bank)	11	64	15	-	-	11.5.5.2	-	-	As a new approach to RE finance the Climate Investment Funds (CIF) initiative should be mentioned (www.climateinvestmentfunds.org) being a collaborative effort between DFI's, learning from (negative) past lessons of similar initiatives (GEF and others). Part of the funds, the Clean Technology Funds, aim at transforming energy generation systems in developing countries showing high reliance to fossil fuels into low carbon sectors. To highlight the flexibility of the application of the funds, as debt, equity and grants. A side box should be incorporated showing the programs and actions of at least one of the approved Investment Programs. IDB could provide an example from the Mexican Renewable Energy Program.	WILL CONSIDER
Sugiyama (CRIEPI)	11	64	-	-	-	-	11	-	Learning curve analysis needs sensitivity analysis and further discussion.	will redraft and delete figure

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
NADAI (CIRED)	11	64	-	-	-	-	11	-	Nice figure, but there shoall be figures of the share / potential of public procurement to back the fact that it can contribute to the move on the curve to a signficiant extent. Any data?	probably delete figure
Soliano Pereira (Universidade Salvador - UNIFACS)	11	64	-	-	-	-	11	-	This figure should be better inserted in the text. The way it is presented leaves it a little out of context. It should better explored.	probably delete figure
NADAI (CIRED)	11	65	10	65	15	-	-	-	Any examples of instruments or nationak expeirences to quote and describe here.	WILL CONSIDER
NADAI (CIRED)	11	65	21	65	21	-	-	-	Refer to table 3	Accepted
Sawyer (Global Wind Energy Council)	11	65	7	-	-	11.5.5.2	-	-	"Need a definition of ""public finance mechanisms"""	Accepted
Sawyer (Global Wind Energy Council)	11	65	9	-	-	11.5.5.2	-	-	Add: by loan, or soft loan, given to project by policy driven banks, such as European Investment Bank.	WILL CONSIDER
Hamilton (Chatham House)	11	65	16	-	-	11.5.5.2.1	-	-	Add in here some of the information available about the public stimulus packages and analysis of their effectiveness - New Energy Finance has some statistics and analysis of their effect, and UNEP Sustainable Energy Finance Initiative will do as well. More generally UNEP/SEFI have done considerable work on public financing	WILL CONSIDER
Hamilton (Chatham House)	11	65	35	-	-	11.5.5.2.2	-	-	"This is a useful section and needs to be repositioned earlier as it helps to explain how finance works. In addition to Table5 Overview of Public Finance Mechanisms (page 68) it might be useful to give an overview of the risks that project financiers face: both the sections on sources of finance; and section 11.5.5.2.3 go straight into risk management, whereas an explanation of typical method of assessing risk, the range of financial and non-financial risks would help, including a specific reference to policy and regulatory risk. Refer to 'Private Financing of Renewable Energy - A Guide for Policymakers', Chatham House, UNEP and Bloomberg New Energy Finance: this contains an overview of what the different financial insitutions do, their expectations of returns for the risks"	good points. Will be addressed
de Haan (Ernst Basler + Partner AG)	11	65	-	-	-	11.5.5.2.2	-	-	This subsection should be shortened. If possible, sixth-level headings 11.5.5.2.2.1 to 11.5.5.2.2.3 should be omitted and their content shortened.	Accepted
NADAI (CIRED)	11	66	-	67	-	-	-	-	A scheme summing up the the instruments and their relations would make the content much clearer.	Accepted
NADAI (CIRED)	11	66	27	66	29	-	-	-	sentence unclear.	Accepted
NADAI (CIRED)	11	66	36	66	37	-	-	-	The prsecne of a sufciiently develoepd financial sectro and the conditions ofr its emergence woudl really fit into the section abt the enabling envt (11.6), and keep here the description of instruments.	already addressed in 11.6
Sawyer (Global Wind Energy Council)	11	66	32	-	-	11.5.5.2.2.2	-	-	Add: regional development banks, such as Asian Development Bank, as an option for developing countries' equity finance.	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hongo (Japan Bank for International Cooperation)	11	67	8	62	35	11.5.2.5.2.3	-	-	"I will make comments on this section based on my lending experiences. Risk mitigation consists of pre lending due diligence and risk mitigation during operation. Direct finance to small projects are not so easy because burden for these risk mitigation is too big, compare to their profit. However insurance may take different approach because a low of large numbers is another approach of insurance. 'Less than USD15 million is too small' is applicable when it means one by one insurance approach. Similar approach is used in the fields of SME finance. Due diligence is not so heavy but by using past defaults ratio and past experience good performance may be expected. Another players for small scale projects is specialized in these field, like ESCO or small bio mass, which are very much locally oriented projects. When we illustrate the outline of finance to RE, then it is better to describe its depending on projects size. Large one are mainly by global or nation wide players and small one are specialized and local or Privets equity type fund. Middle are these combination. "	Accepted
Hongo (Japan Bank for International Cooperation)	11	67	-	-	-	11.5.2.5.2.3	-	5	Debt - Guarantee: Large projects in developing countries often financed by public and private co financing because co-financing with public financing can control the project risk easier by using their influence on many different issues. It is better to tell the role of co financing.	Accepted
Dunn (GE Energy)	11	69	1	-	-	11.5.6	-	-	"An important point to include here regarding RE policy is that ""no one size fits all"" but that effective policies do share common characteristics. For an industry (GE) perspective on global lessons learned and the attributes of effective renewables policy, see page 10 of SRREN_Draft1_Review_Dunn_Seth_Material_11.pdf."	Accepted
Sawyer (Global Wind Energy Council)	11	69	16	-	-	11.5.6	-	-	Add example to explain non-economic barriers, such as administrative barriers, risks for the investors	Accepted
NADAI (CIRED)	11	69	1	-	-	11.5.6	-	-	If this is a synthesis , this should be based on the previous developments and conclusions, not on biblio references or new insgiht (as for instance line 8 to 17 page 70, which by the way is redundant with 11.6.2.2).	will be rewritten

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	69	3	69	3	11.5.6.	-	-	"Add 'Energy policy and' in front of 'support schemes', and ensure the importance of embedding renewable energy policy in wider energy policy remains reflected in the second paragraph on page 70, re 'viable, predictable, clear and long-term government commitment and policy framework'. (lines 8-17), this is currently only referenced page 70, lines 41 - 43 and this should be more central particularly at the level of operating and regulating the energy system. Note that my own work on 'investment grade' policy (Unlocking Finance for Clean Energy, December 2009, Chatham House Programme Paper), based on extensive evidence-based work with financiers identifies several key issues for deployment: * Clear, unambiguous policy objectives, with clear enforcement provisions * Policy and regulation streamlined across all factors within the boundary of the deal: from planning approval to delivery * Carefully designed incentive or support mechanisms to achieve targets or objectives * Policy stability across a project-relevant duration * Simplicity: to reduce complexity and variables that might add risk * Near-term attention to infrastructure - the planning, integration and regulatory requirements - to ensure the overall system is optimized for significant uptake of RE, and demand-side options. "	Accepted
NADAI (CIRED)	11	69	-	69	-	-	-	5	PPA , please define	Accepted
NADAI (CIRED)	11	70	29	70	43	-	-	-	"This part is anticipating developments and providng results of 11.6 on the basis of a few selected references, instead of : i) closing 11.5 on the basis of what has been discussed and demonstarted in 11.5 and; ii) introducing the next section bybsimply saying that design is not all what matters. Assertions such as L33-35, (quote Farrell 2008 on owneship and acceptance) are not at their place here (and not based on published paper). "	will be rewritten
Tagashira (Central Research Institute of Electric Power Industry)	11	70	23	-	-	-	-	-	This is true, but might lead to readers' misunderstanding. Taking good examples of the combination of policies in this paragraph would be better.	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	71	8	-	-	-	-	-	"Drop the words ""and Regional Issues"" from the title. The section does not deal with regional issues."	The title was agreed upon within scoping paper and passed by IPCC plenary. We recognise regional issues are not dealt with adequately and we have done so by the SOD.
Haum (German Advisory Council on Global Change)	11	71	8	-	-	-	-	-	"The importance of ""Enabling Environment"" is politically very contested between Annex II and Non-Annex I countries in relation to technology transfer. Suggest to find a different, more neutral term with same meaning "	We are unable to change the title 'enabling environment' as it was agreed as a title within the scoping paper and passed by the IPCC plenary.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Dunn (GE Energy)	11	71	8	-	-	11.6	-	-	"As discussed during the meeting, the focus on supply-push (e.g. R&D) and demand-pull (e.g. FIT and RPS) is entirely appropriate, but ""enabling"" policies such as siting/permitting and transmission/integration merit coverage here (this is a somewhat wind-centric view but holds for CSP and other RE technologies without question). Examples of policies range from streamlined permitting via one-stop agencies to larger balancing areas (i.e. US ITO/RTOs) to broadened transmission planning, cost allocation, and siting. The US DOE 20% report and AWEA/SEIA Transmission Superhighways are potential sources on the US side. See SRREN_Draft1_Review_Dunn_Seth_Material_12.pdf and SRREN_Draft1_Review_Dunn_Seth_Material_13.pdf. For a GE perspective on the 20% wind report, see SRREN_Draft1_Review_Dunn_Seth_Material_14.pdf."	THE DISCUSSION OF RELATIONSHIP BETWEEN CARBON POLICIES AND RE CLEARLY NEEDS MORE WORK AND THIS COMMENT IS NOT REPEATED FOR THE POINTS BELOW
Yamaguchi (The Institute of Energy Economics, Japan)	11	71	8	-	-	11.6	-	-	Don't we have regional issues--EU, America, Asia, Africa and OECD vs developing economies?	Case studies from different regions of the world will be introduced
SCOWCROFT (EURELECTRIC)	11	71	-	-	-	-	12	-	In this figure RE tech development is in the centre. Believe climate mitigation by RE, or RE deployment should be the centre of attention. The illustration also lacks an explicit reference to energy markets/electricity markets?	RE deployment has been put at the centre. Energy markets/electricity markets will be mentioned into brackets under business and insitutions …)
Bilello (NREL)	11	71	-	-	-	-	12	-	Text in this figure is not legible	OK
Soliano Pereira (Universidade Salvador - UNIFACS)	11	71	-	-	-	-	12	-	There is no reference to the figure in the text.	Will put a reference .
Soliano Pereira (Universidade Salvador - UNIFACS)	11	72	7	-	-	-	-	-	"Eliminate ""we"""	OK
Soliano Pereira (Universidade Salvador - UNIFACS)	11	72	17	-	-	-	-	-	"Eliminate ""we"""	OK
Soliano Pereira (Universidade Salvador - UNIFACS)	11	72	18	-	-	-	-	-	"Eliminate ""we"""	OK
Bilello (NREL)	11	72	35	-	-	-	-	-	"Should be ""through"" not ""though"". Thought this error might be overlooked later."	Accepted
Kessels (International Energy Agency Clean Coal Centre)	11	72	30	73	25	-	-	-	I suggest to save text space you delete this text and the figure and begin at the key challenges paragraph	We may reword this to make it clearer. However, we consider it is important to introduce the concept of the transition literature. This discusses how technologies are able to develop or the barriers which occur which undermine them. This is central to the topic.
Soliano Pereira (Universidade Salvador - UNIFACS)	11	72	22	-	-	-	-	-	It could very useful to describe the enabling environment of a country with a succeesful story, such as Germany, Denmark or Spain	This is done for instance later, table 6 page 83 for germany. This comment is part of an introduction; the point is discussed in more depth later.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Soliano Pereira (Universidade Salvador - UNIFACS)	11	72	11	-	-	-	-	-	It should be rephrased to minimize the idea that RE policies are embedded in a very complex process in which is necessary to manage a series of intangible aspects. Policy makers should not have the feeling of being overwhelmed in the efforts to design a RE policy.	OK
Soliano Pereira (Universidade Salvador - UNIFACS)	11	72	15	-	-	-	-	-	Provide references	This is the general introductive part, conveying messages. Rerferences come in the text later. Will be more clearly rephrased as an introductive statement.
Nilsson (Lund University)	11	72	3	72	6	-	-	-	The definition of enabling environment comes much too late?	We agree, we will include a definition in 11.1 but we are keeping this line of argument in 11.6
Haum (German Advisory Council on Global Change)	11	72	-	-	-	11.6.1	-	-	"The relation of ""enabling environments"" and the section on system change is unexplained in the text. Needs to be made eviden to the reader "	An introductive sentence will introduce the relationship, saying that enabling environment is an issue because tech always are systemic.
Haum (German Advisory Council on Global Change)	11	72	-	-	-	11.6.1	-	-	The whole section is difficult to follow and needs clear structure (btw: allmost all sections are very clear and very well structured)	Subtitles will be introduced in a bullet point form throughout this section.
Soliano Pereira (Universidade Salvador - UNIFACS)	11	72	-	-	-	11.6.1	-	-	This section can be shrunken and adapted to focus more on RE issues, avoiding conceptualizing too much. Figure 13 can be eliminated.	We will revise section but content will stay because it is necessary to argument. We will think about the figure. We will use another figure if there is a more up to date one which visually represents the ideas we are trying to get across better.
Hamilton (Chatham House)	11	76	3	-	-	11.6.2, 11.6.3	-	-	This would be better linked to section 11.5.5.2 and combined with 11.5.5.2.3 and 11.6.3 - these are artificial splits between these sections. In practice in a deal financiers will do an assessment of the range of risks, and then seek to allocate and manage those. One might argue that 'easing access to finance' could be better focused with the public finance sections (refer comment 43 above).	Authors consider that this issue should be treated as it is
Brunner (PIK)	11	76	16	-	-	-	-	-	"""inventive"" or ""innovative""? Check with headline of section 11.6.2.3"	Social innovation is a notion that is not satbilised or well definied in the litertaure outside of organisational analysis, but some apporaches start to emerge in publication. We will keep innovative and eifne what we term social innovation, based on existing publication (e.g; Kok book)
Soliano Pereira (Universidade Salvador - UNIFACS)	11	76	35	-	-	-	-	-	"Include the following text to reduce the emphasis on wind energy: ""or Brazil approach to ethanol policy (Suani Teixeira Coelho, Jos□oldemberg, Oswaldo Lucon and Patricia Guardabassi. 2006. ""Brazilian sugarcane ethanol: lessons learned"". Energy for Sustainable Development. Volume 10, Issue 2, June 2006, Pages 26-39)."	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	76	9	-	-	-	-	-	Provide references	We will refer the sections which follow in the section and where the relevant refs are situated..

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Bilello (NREL)	11	76	10	76	14	11.6.2	-	-	"Some might argue that FITs remove too much risk by guaranteeing returns and thus lower incentives for further innovation on technology and the enabling environment. Policies aimed at reducing risk can thus lead to technologies that are ""prematurely"" entrenched."	We recognise that this is one argument and it is addressed in 11.5. The discussion occurs for example in Solar German policy : Frondel Manuel, Ritter Nolan, Schmidt Christoph M. (2008) “Germany’s solar cell promotion: Dark clouds on the horizon” Energy Policy 36 () 4198–4204.
Kyte (E.ON AG)	11	76	3	-	-	11.6.2	-	-	"The integration of RE-policies and carbon market signals should be discussed clearer and more thoroughly. Carbon markets get most attention in climate change negotiation and their interaction with other measure should be addressed very specifically to policy makers. +N5"	We will review 11.6.7 and move it to section 11.5 so this topic will be covered and this comment into account
Haum (German Advisory Council on Global Change)	11	76	-	-	-	11.6.2	-	-	Relation of that section to enabling environments is unexplained in the text. Needs to be made eviden to the reader	OK, an introductive framing relating risk to enbaling envt will be added
Brunner (PIK)	11	76	17	-	-	11.6.2.1	-	-	The difference between sections 11.6.2.1 and 11.6.2.2 is not entirely clear to me. Do they not emphasize the importance of essentially the same thing, i.e. a stable regulatory framework?	1 is about political stability and the possibility of RE policies/ deployment in unstable political contexts, 2 is about regulatory stability and "stable" (mandate government commitment to RE policy.
Kessels (International Energy Agency Clean Coal Centre)	11	77	3	78	10	-	-	-	Do you need this section on innovation as it has already been discussed in the chapter	This discussion is not about technological innovation. It is examples of innovative institutional settings, small development models and their relation with risk redcution.
Haum (German Advisory Council on Global Change)	11	77	8	-	-	-	-	-	Long term contracts are hardly an innovative institutional setting but have existed for energy from other sources long before	OK, they are not new but they play a role, we will say that they are not new but play an important role in reducing risk.
Bilello (NREL)	11	77	23	77	33	-	-	-	This paragraph is not very clear, or at least not very helpful.	OK, to clarify with GOvind (author)
Bilello (NREL)	11	77	11	76	12	-	-	-	Unclear sentence	OK
Sawyer (Global Wind Energy Council)	11	77	12	-	-	11.6.2.3	-	-	"setence need clean up, still contains ""??"""	OK
Nilsson (Lund University)	11	77	3	-	-	11.6.2.3	-	-	Does micro-financing and other DC aspects get sufficient attention in the chapter? Is the case of PV-lanterns worth mentioning? Seems to be taking off some countries (PV, battery and white LED)	It will be covered 11.5
Kessels (International Energy Agency Clean Coal Centre)	11	78	33	79	19	-	-	-	I think you perhaps should include the issue of intellectual property rights which in Non RE and an issue in some cases	IPR is another aspect of the enabling environment (and will be addressed further in page 74 line 17 by adding text) but this section is focussing on the enabling environment for financing.
Devernay (Electricity of France - EDF Hydro Engineering Centre)	11	78	22	78	23	-	-	-	The 90% figure seems not to take into account investment in hydropower.	We will check reference
Bilello (NREL)	11	79	14	-	-	-	-	-	"Again, this should be ""exit"" not ""exist"""	OK
Bilello (NREL)	11	79	24	79	41	-	-	-	"This is a good example; less theoretical than previous language."	thanks

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Bilello (NREL)	11	79	20	79	23	-	-	-	Perhaps, but the recent financial crisis makes this sound dated or na□.	Accepted
Sawyer (Global Wind Energy Council)	11	79	41	-	-	11.6.3	-	-	Add: However, policies support and strong government interferences helped lots of companies to survive the hardest year. For example, in US, the government introduced the Investment Tax Credit, to replace the (at least temporarily) dysfunctional Production tax Credit, which was facing huge difficulties due to the lack of any large financial institutions that needed to shield hundreds of millions of dollars from tax. In Europe, government grants and policy driven banks helped to finance some of the projects. Utilities also financed some new projects off their own balance sheets.	thank you for the information
NADAI (CIRED)	11	80	-	81	-	-	-	-	"Erro int he structure of the section : 11.6.4.2.; 11.6.4.3.; and 11.6.4.4 are bullet points (subtitles) which pertain to 11.6.4.1"	Accepted
Haum (German Advisory Council on Global Change)	11	80	2	80	15	-	-	-	Paragraph needs references	This is an introductory para but we will refer to the relevant secticons where point is discussed and reffed
Soliano Pereira (Universidade Salvador - UNIFACS)	11	80	-	-	-	11.6.4.1	-	-	It is too short to constitute one sub-section.	Exact, but it is not a section, see comment 733
Bilello (NREL)	11	81	27	81	28	-	-	-	"""□allows hittherto consumers to take□"" Missing word or confusing construction."	OK
Londo (Energy research Centre of the Netherlands)	11	81	12	81	33	11.6.4.3	-	-	"Suggestion: the Changing Behaviour project (EU-FP7) analyses the success and failure of programmes aiming at behavioural changes (towards energy efficiency in the built environment). See http://www.energychange.info/. Some key messages: behaviour changes when at least these criteria are met: (i) people get a better insight in the way their habits affect energy use, (ii) the tools and technologies to do something are readily available, and (iii) changing habits or installing new technologies is done by a their social peers as well; it's a collective action. May be this is useful info. "	Reference will be reviewed
Kessels (International Energy Agency Clean Coal Centre)	11	82	21	82	32	-	-	-	Interesting to compare these 3 european countries but it would also be good to compare it with China's accelerated deployment of wind and their policy processes and institutions	We agree with this and will try and find peer reviewed literature about the develoment and social acceptance of wind power in China.
Fulton (Deutsche Bank)	11	82	3	-	-	-	-	-	Rogers 2003 citation on diffusion is not referenced in bibliography. Is this the Rogers mentioned in Ch 2?	OK
Bilello (NREL)	11	83	-	84	-	11.6.4.6	-	-	"Consider deleting this section; too detached and theoretical."	We will change the language and try to streamline the section but the issues described here are very important.
Bilello (NREL)	11	83	-	-	-	-	-	6	Missing categories for columns? Otherwise this matrix is unclear.	The columns titles have been deleted, they will be reintroduced.
Haum (German Advisory Council on Global Change)	11	84	30	84	39	-	-	-	community orientation as a generally supporting social structure is wrong as e.g in India community orientation of RE projects failed and household PV systems were more successful. Better: tailoring the social structure to specific end-user demand	We agree with your specific example. Overall we will give more space to this issue and compare a number of different countries and case studies

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Nilsson (Lund University)	11	84	40	-	-	11.6.5	-	-	There is a whole literature on policy integration worth looking at.	LA will be contact to provide references
Hamilton (Chatham House)	11	85	2	85	3	11.6.5	-	-	"This is a bit confusing and theoretical re the assertion of property rights; there is also a debate over the importance of intellectual property rights and technology ('technology transfer'), and some references can be provided. THis is raised very briefly P89, lines 22-25 under 11.6.6. on Tech Transfer but does probably warrant more detailed assessment of work in this area given its relevance to policymakers. As per comment above, Figure 14 is repetitive of two earlier parts of the report."	The sub section will be rewritten in more fluid language. This section is not the place to deal with intellectual property rights but it will be dealt with on page 74. We will delete Figure 14.
Nilsson (Lund University)	11	85	5	-	-	11.6.5.1	-	-	Good place to cite M Ostrom	LA will be contact to provide references
Bilello (NREL)	11	86	25	-	-	-	-	-	This is not a proper subtitle.	Will try to find a better one
Soliano Pereira (Universidade Salvador - UNIFACS)	11	86	-	-	-	11.6.5.2	-	-	"Provided land use is being discussed, a sub-section on hydropower should be included. The report ""Dams and development: A new framework for decision-making"", by the World Commission on Dams is still a good reference."	the reference will be reviewed, but we won't be giving a sub-section or paragraph unless warrented
Soliano Pereira (Universidade Salvador - UNIFACS)	11	86	-	-	-	11.6.5.2	-	-	A brief discussion on land use and biofuels can also be included here.	We will investigate the literature further and liase with the chapter 2 biomass team.
Bilello (NREL)	11	87	1	87	11	-	-	-	True, but it isn't always so simple that participatory efforts yield better results. Both sides of an argument can and do follow this practice (Cape Wind) and it seems more likely that public approval/disapproval depends on location and time specific factors that may be difficult to understand in advance.	Please provide references on the Cape widn project if any. Will amend the text.
Sawyer (Global Wind Energy Council)	11	87	8	-	-	11.6.5.2.1	-	-	"add ""potential"" between ""increase"" and ""social"""	Accepted
Bilello (NREL)	11	87	-	-	-	11.6.5.2.2	-	-	Strangely, this section has no theoretical underpinning (unlike the excessive theory in other sections). If the MSP were explained in a more helpful way, this wouldn't be so bad, but the reader who is not familiar with MSP is lost. Would be more helpful to explicitly list the issues here: navigation, fishing, national security, etc.	We will rewrite this section to take account of your concerns.
Bilello (NREL)	11	87	-	-	-	11.6.5.2.3	-	-	Mention the ongoing process in the United States convened by the Western Governor's Association that is very applicable here?	This reference will be reviewed
Devernay (Electricity of France - EDF Hydro Engineering Centre)	11	88	2	88	4	-	-	-	"The sentence should not be limited to ""micro/pico hydro systems"". Hydropower of all sizes should be covered under the heading ""other Renewable Energy"", or in view of its significance in the world renewable portfolio, be the subject of a full paragraph."	The issue isn't about share that hydro could provide but the fair access to the resource and its sustainability.
Soliano Pereira (Universidade Salvador - UNIFACS)	11	88	23	-	-	-	-	-	Rewrite the text to include TT between developing countries, South-South cooperation.	Technology transfer, including capabilities and skills is a very important issue. This section will be rewritten.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Haum (German Advisory Council on Global Change)	11	88	23	-	-	-	-	-	see comment above	Technology transfer, including capabilities and skills is a very important issue. This section will be rewritten.
Haum (German Advisory Council on Global Change)	11	88	22	-	-	-	-	-	This is the weakest statement of the chapter There is 40 year of research and vast knowledge about international technology transfer from the field of industrial technology wich is not applied to low carbon tech for political reasons	see above
Sawyer (Global Wind Energy Council)	11	88	26	-	-	11.6.6	-	-	"Delete the "","" in front of ""more posivitve experiences"""	Technology transfer, including capabilities and skills is a very important issue. This section will be rewritten.
Hongo (Japan Bank for International Cooperation)	11	88	11	88	14	11.6.6	-	-	I assume that technology transfer in this section means both having RE projects and having capacity to supply equipments and services. Technologies are owned by the private sector mainly and its transfer is from the private to the private. I am not sure what the mechanism of transfer by ODA is assumed here. (Clarification)	Technology transfer, including capabilities and skills is a very important issue. This section will be rewritten.
de Haan (Ernst Basler + Partner AG)	11	89	-	-	-	-	14	-	Fig. 14 reproduces concepts and definitions already depicted in full in Figs. 1, 2, 8. Please delete Fig. 14.	Technology transfer, including capabilities and skills is a very important issue. This section will be rewritten.
Sugiyama (CRIEPI)	11	89	-	-	-	-	14	-	The figure does not incorporate technological spillover from other technologies and so redrafting is desireable. For example PV is benefited from silicon computer technologies.	Technology transfer, including capabilities and skills is a very important issue. This section will be rewritten.
Haum (German Advisory Council on Global Change)	11	90	10	90	17	-	-	-	" paragraph is misrepresentation. Lewis/ Wiser state explicitely that policy enviornment (creating demand) and local content requirements (industrial policy) were central. Conflating both into ""strong domestic conditions"" takes away important aspect "	Technology transfer, including capabilities and skills is a very important issue. This section will be rewritten.
Haum (German Advisory Council on Global Change)	11	90	10	90	17	-	-	-	cetral to north -south debates on technology transfer	Technology transfer, including capabilities and skills is a very important issue. This section will be rewritten.
Brunner (PIK)	11	91	1	-	-	-	-	-	"The word ""climate"" is probably missing in front of ""change mitigation"". Besides, I would suggest a different heading because the implied dichotomy between climate change mitigation policies and RE support policies is misleading. RE support policies also aim at climate change mitigation (and energy security, etc.). I would suggest to label the section ""Economic interactions between carbon pricing and RE support policies""."	We will review and move this section to section 11.5 and take this comment into account
Soliano Pereira (Universidade Salvador - UNIFACS)	11	91	8	91	16	-	-	-	Again, the concept of market failure. It can be dropped and included in the glossary.	We will review and move this section to section 11.5 and take this comment into account
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	91	-	96	-	-	-	-	reassess section 11.6.7 in conjunction with 11.4.	We will review and move this section to section 11.5 and take this comment into account

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Yamaguchi (The Institute of Energy Economics, Japan)	11	91	1	-	-	11.6.7	-	-	missing CDM/JI?	It will be covered 11.5
Hamilton (Chatham House)	11	91	-	-	-	11.6.7.1	-	-	Note the overlap with section 11.4.1.1. Page 28.	We will review and move this section to section 11.5 and take this comment into account
Bilello (NREL)	11	91	-	94	-	11.6.7.1-11.6.7.2	-	-	Consider deleting these two sections. Very theoretical (and speculative) and not very useful to most readers.	We will review and move this section to section 11.5 and take this comment into account
Brunner (PIK)	11	92	26	-	-	-	-	-	Reference to Gerlach and van der Zwaan (2006) is missing from reference list.	We will review and move this section to section 11.5 and take this comment into account
Brunner (PIK)	11	92	34	-	-	-	-	-	Reference to Schmidt and Marschinksi (2009) is missing from reference list.	We will review and move this section to section 11.5 and take this comment into account
Brunner (PIK)	11	92	1	-	-	-	-	-	Reference to Tinbergen (1952) is missing from reference list.	We will review and move this section to section 11.5 and take this comment into account
Hamilton (Chatham House)	11	92	4	92	9	11.6.7.1	-	-	Not sure why there is such a strong focus on R&D. To reduce GHGs in the near term it is deployment of existing RE technologies surely? The conclusion is correct though that carbon pricing on its own is not a primary driver of investment into renewable energy. Re the conclusion in the second part of this paragraph - that modelling suggests that the bulf of GHG reductions will be brought about by pricing mechanism, might be useful to cross reference that against the whole support mechanism discussion - do you define FiTs as a pricing mechanism? The evidence from financiers is that RE policy is a considerably stronger force in driving investment towards RE that carbon pricing, although there have been one or two exceptions in the context of CDM (notably Chinese wind but this is on top of a wideranging RE policy though).	We will review and move this section to section 11.5 and take this comment into account
Sawyer (Global Wind Energy Council)	11	93	30	-	-	-	-	-	"Need a definition of ""producer prices"". Should it be Producer's gains""? Thus the second part of the sentence doesn□t make sense. "	We will review and move this section to section 11.5 and take this comment into account
Fulton (Deutsche Bank)	11	93	43	94	6	-	-	-	"Not helpful to say carbon prices maybe should slope down in the future or slope up in the future; depends on your point of view."	We will review and move this section to section 11.5 and take this comment into account
Sawyer (Global Wind Energy Council)	11	93	25	93	29	-	-	-	"There is a need to clearly define ""the price received by the producer of fossile fuels"" . In this sentence, I understand this ""price"" as the ""gains"" received by the producer per unit of fossile fuel produced. In line 30, ""producer price"" occrues again, but seems to be a different definition. what is the latter one? If these two concepts are the same, then the logic in sentence 30 is wrong."	We will review and move this section to section 11.5 and take this comment into account
Philibert (International Energy Agecy)	11	93	39	94	6	-	-	-	This whole argumentation is very odd - and the conclusion that RE policies will increase emissions because it would reduce carbon prices may be wrong: it's the overall costs of energy that needs to be considered in assessing the demand, not one single element of it.	We will review and move this section to section 11.5 and take this comment into account

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Brunner (PIK)	11	93	5	-	-	-	-	-	Why is a carbon tax necessarily part of the optimal policy mix? To my knowledge the debate on prices vs. quantities is still ongoing and it may be that a tradable permit system rather than a carbon tax should be part of the policy mix, especially if you consider the perverse intertemporal incentives carbon taxation may provide (see Sinn 2008, cited on the same page).	We will review and move this section to section 11.5 and take this comment into account
Hamilton (Chatham House)	11	93	16	93	18	11.6.7.2	-	-	"It might be useful to differentiate the objectives of GHG pricing and RE/energy policies, as a reminder. Emissions trading, as introduced originally through the Kyoto Protocol, was primarily designed as a mechanism to enable the near-term least cost reduction of emissions internationally; whereas RE policy, generally, is about a change in the composition of the energy mix/infrastructure enabling greater emissions reductions in the medium-term. This is a personal observation, and I haven't got a reference for this. In reality I think the confluence between emissions trading and energy policy is still being worked out."	We will review and move this section to section 11.5 and take this comment into account
Philibert (International Energy Agecy)	11	93	16	-	-	11.6.7.2	-	-	This sections touches important topics but seems to miss the important point: RE policies might have an important effect in keeping the prices of fossil fuels relatively lower than they would otherwise be. This should be considered a reason for maintaining some transfer payment from fossil fuel consumption to RE development over the long term: consumers of fossil fuels will enjoy lower prices due to the consumption of RE by others, and it is thus fair to tax these fossiles fuels to recover in part these external benefits of RE policies, and reduce RE costs using the revenues from theses taxes to finance the incentives for RE such as feed-in tariffs or premiums (or other instruments, such as tax cuts for innovation, demonstration, etc.)	We will review 11.6.7 and move it to section 11.5 so this topic will be covered and this comment into account
Hongo (Japan Bank for International Cooperation)	11	94	8	94	9	11.6.7.2	-	-	By adopting hard reduction target, carbon price beyond 2012 become higher. WEO2009 by IEA said USD50/ton or higher as a future price. But even fusil energy price includes carbon price some RE, like PV or ocean may not be still competitive with fusil energy. This means that other merits, like energy security may count on the economic merit of RE.	We will review and move this section to section 11.5 and take this comment into account
Dunn (GE Energy)	11	94	39	-	-	11.6.7.3.1-2	-	-	"I would question the argument that RE policy could depress the carbon price signal and. But regarding the effect of pricing on RE objectives: as discussed during the meeting, experience to date with CERs and the CDM should be covered as a discrete topic in this chapter (perhaps as a box). This may also reinforce the broader chapter message that carbon prices on their own are unlikely to stimulate rapid near-term RE deployment and that targeted RE policies are therefore needed. (From an industry perspective, we are more likely than not to be in a second-best world of below-optimal pricing (p. 96, 16-17) that justifies stronger RE policies; this message seems to belong further up in the chapter as a driver (as it leads off the Executive Summary)."	We will review 11.6.7 and move it to section 11.5 so this topic will be covered and this comment into account

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	95	18	95	20	-	-	-	"The statement 'a lower carbon price ☐.the marginal cost curve shifts, ☐.' is nonsense. The curve does not shift. Instead a movement ALONG the curve occurs."	We will review and move this section to section 11.5 and take this comment into account
Philibert (International Energy Agecy)	11	95	12	95	12	-	-	-	Reference to (Blyth et al., 2009) is missing in the References section	We will review and move this section to section 11.5 and take this comment into account
Philibert (International Energy Agecy)	11	95	29	95	31	11.6.7.3.1	-	-	"This sections mixes sound observations and erroneous conclusions. It is true that if you have a cap and trade system, emissions are given by the target, and an incentive for renewables in the covered sector will not change the emissions of that sector - and will reduce the carbon price. However, the total effect on the electricity costs depend on the costs of these renewables, and the cost difference between renewables and alternatives is probably expressed by the cost of the incentives. Therefore, one cannot conclude that the overall cost of electricity is lower, it is more probably higher than without the RE incentive, for in any case exactly as many CO2 reductions will be undertaken, whether through RE deployment and other means, and if the incentive forces to a different equilibrium than without it, it can only be because the new equilibrium costs more. Hence, there seems to be no risk of rebound effect. Even if there was one, one may wonder why this rebound effect ""would likely cancel the impacts of RE policies"", and what this sentence exactly means: the amount of emissions are set by the carbon quota, so RE policies by construction cannot have any impact on CO2 emissions, and this has nothing to do with electricity prices, rebound effect or the mysterious ""other induced increases in demand""."	We will review and move this section to section 11.5 and take this comment into account
de Haan (Ernst Basler + Partner AG)	11	95	14	95	18	11.6.7.3.1	-	-	Is this true? Of course, in a cap-and-trade system, any given GHG emission reduction (not only by renewables) reduces the gap and therefore lowers the carbon price. But shouldn't we assume that this GHG emission reduction is part of the cap-and-trade system boundary, i.e. has been realized because there is a carbon price in the first place, and would not have been done if there had not been a cap-and-trade system in place? So in fact in a cap-and-trade system, carbon prices will induce additional mitigation measures, the cheaper measures at first of course, and with each measure completed the marginal carbon price for the remaining gap to the defined GHG cap will increase (not decrease). So the term rebound effect is not justified here, and the proposed feedback of renewables (or any other GHG emission reduction) on carbon prices within cap-and-trade systems is normal market behavior and needed for correct (carbon) price signals coming into existence.	We will review and move this section to section 11.5 and take this comment into account

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	95	17	95	20	11.6. 7.3.1	-	-	The allocation of emissions allowances is the critical issue here - if allowances are allocated on the basis that RE (or EE) objectives are going to be met, then there should not be a reduction in carbon prices. This was explained to me pers comm by emissions traders when this issue arose in the context of the EU's introduction of its mandatory RE target, and policymakers were concerned about the 'collapse' of the carbon market due to lower demand for allowances. However, if allocation is done on the basis of compliance with RE targets then any failure to comply with RE goals (as allocated to the electricity sector) would mean higher demand for allowances and therefore, arguably, a higher price. I don't have a reference for that, perhaps it was discussed in the papers cited.	We will review and move this section to section 11.5 and take this comment into account
McCormick (International Union for Conservation of Nature (IUCN))	11	96	41	96	41	-	-	-	"I would separate these ideas more -- 'shift in their energy use; it is instructive□'"	We will turn them into 2 sentences
Brunner (PIK)	11	96	11	-	-	-	-	-	"It is stated that ""governments cannot commit their successors"" which I believe is untrue. In fact, governments commit their successor all the time by, for example, strategically managing public debt (see Persson and Tabellini on ""Political economics: explaining economic policy""), founding independent agencies (e.g. central banks), or amending written constitutions. In a forthcoming paper (Brunner 2010: ""Credible carbon policy revisited"") I discuss various commitment devices government could use to entrench emissions pricing in credible structures, among them delegation of policy control to a government-independent carbon agency or issuance of put options on emission allowances. "	Very relevant for the issue we will be use it in 11.6.2
McCormick (International Union for Conservation of Nature (IUCN))	11	96	40	96	40	-	-	-	again, only one of 'towns and communities' is necessary	see number 799 above
McCormick (International Union for Conservation of Nature (IUCN))	11	96	34	96	34	-	-	-	and/or nuclear' what? Nuclear power? Nuclear energy? Something is needed to better complete the sentence	If this sentence continues, we will finish chapter by adding power, as in 'nuclear power'.
McCormick (International Union for Conservation of Nature (IUCN))	11	96	36	96	37	-	-	-	around the world' is not necessary	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	96	32	-	-	-	-	-	Brazil could be included in this list, due to more the 80% of its electricity coming from hydropower.	If this sentence continues in some form we will include Brazil
McCormick (International Union for Conservation of Nature (IUCN))	11	96	26	96	26	-	-	-	either don□t use comma after 'policies', or add a descriptor (provided?) before 'evidence'	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
McCormick (International Union for Conservation of Nature (IUCN))	11	96	36	96	36	-	-	-	I don't think you need both towns and communities, it is a bit redundant.	We accept that this needs better wording - but communities can be about both location and interests and may differ in scale from a large scale town/city etc
McCormick (International Union for Conservation of Nature (IUCN))	11	96	37	96	39	-	-	-	i.e.,	Accepted
SCOWCROFT (EURELECTRIC)	11	96	27	-	30	-	-	-	Inconsistent to argue at one place in the report that you need to understand local/regional differences, and in this chapter to implicitly argue that there is one set of policies that will deliver RE in all countries.	We understand that the wording is ambiguous and will rectify this
McCormick (International Union for Conservation of Nature (IUCN))	11	96	32	96	32	-	-	-	list the resource along with the country	If this sentence continues in some form I will include the resource beside the country
contaldi (ISPRA, Institute for Environmental Protection and Research)	11	96	-	110	-	-	-	-	The entire para is academic and refers to the long term scenario. I do not see the need to analize those general concepts here. In my opinion the para can be dropped.	Accepted
de Haan (Ernst Basler + Partner AG)	11	96	31	96	42	-	-	-	These lines can be deleted for 2 reasons: First, the chapter 11 is too long and shortening is required. Second, it is highly unsure whether those very few communities in the world that have more than 50% of their energy covered by RE can serve as example for the rest of the world. Maybe the circumstances for these communities are simply very special and differ fundamentally from the circumstances for the rest of the world. So it is wise to analyze which requirements are needed for additional communities to have RE as their main source of energy, but it is highly questionable that looking at some rare cases it the right course of action for this.	We accept that its complicated to transfer learning from these unusual comunities, on the other hand we do believe that we should be able to take some learning from them. However,this section will be re-written to explain in more detail the difficulties of moving from one system to another
McCormick (International Union for Conservation of Nature (IUCN))	11	96	28	96	30	-	-	-	this sentence is too long, and doesn't make sense--needs clarification	will rewrite this
McCormick (International Union for Conservation of Nature (IUCN))	11	96	37	96	39	-	-	-	this sentence is unclear, and contains too many separate clauses	We will rewrite this
Hamilton (Chatham House)	11	96	19	-	-	11.7	-	-	link this section with the scenarios in Chapter 10.	It is necessary to do this
Soliano Pereira (Universidade Salvador - UNIFACS)	11	97	19	-	-	-	-	-	"Eliminate ""we"""	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	97	10	97	10	-	-	-	11.2 and 11.6, which provide	Comment incomplete
McCormick (International Union for Conservation of Nature (IUCN))	11	97	18	97	18	-	-	-	agreement is off --maybe change to what key issues and policy choices are necessary□	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
McCormick (International Union for Conservation of Nature (IUCN))	11	97	13	97	13	-	-	-	is large the right word? Maybe use abundant?	We will use another word from large to describe the literature - maybe abundant, deep?
McCormick (International Union for Conservation of Nature (IUCN))	11	97	1	97	8	-	-	-	maybe put lines 7-8 above the list, and remove 'as described above'	see number 807 above
McCormick (International Union for Conservation of Nature (IUCN))	11	97	11	97	11	-	-	-	of a large structural shifts' -- either take out the a or make shifts singular	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	97	20	97	20	-	-	-	of incremental (space missing)	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	97	4	97	4	-	-	-	start with 'some of the key choices'	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	97	6	97	6	-	-	-	start with 'what it means'	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	97	1	97	6	-	-	-	the preface 'this section explores' does not flow well with each of these clauses	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	97	15	97	17	-	-	-	this sentence is unclear	Accepted
Hamilton (Chatham House)	11	97	7	97	10	11.7	-	-	"This is a bit confusing - suggest it might be easier to restructure the chapter a bit. This is a really important section in which to raise key practical decisions that policymakers face linked to achieving the scenarios in Ch10, in particular linked to what we know about penetration levels; infrastructure requirements. Re Figure 15, surely the scenario range from Ch10 should be used rather than from Shell (Shell's scenarios have changed over the years as they have explored different assumptions, and e.g. when CCS appeared). "	yes, we will use the ch 10 scenarios rather than use the shell scenarios. This section is going to be radically changed so its not yet clear if we include transition literature. We are likely use ideas about time taken to undertake transitions from a book by Roger Fouquet which looks at various global energy transitions since the 1300's.
McCormick (International Union for Conservation of Nature (IUCN))	11	98	20	98	20	-	-	-	and instead of 'but'?	will edit
McCormick (International Union for Conservation of Nature (IUCN))	11	98	17	98	17	-	-	-	at the same time' as what?	will edit
Bilello (NREL)	11	98	10	-	11	-	-	-	Coal was RELATIVELY easy to transport compared to firewood, for example, but it is not EASY in any respect. Ask the Chinese coastal cities that rely on coal from Sha'anxi!	this section will be rewritten

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Kessels (International Energy Agency Clean Coal Centre)	11	98	6	98	21	-	-	-	Delete to save space does as it is covered elsewhere	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	98	6	98	6	-	-	-	muscles?	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	98	8	98	10	-	-	-	switch the clauses -- because of the new industrial changes, energy had to be developed	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	98	7	98	7	-	-	-	the' is not necessary before 'limited use'	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	98	10	98	12	-	-	-	the last clause of the sentence needs to be rewritten, and doesn't fit well into what comes before	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	98	6	98	16	-	-	-	the section seems kind of elementary, and sentence construction in general is awkward	Accepted
Devernay (Electricity of France - EDF Hydro Engineering Centre)	11	98	-	-	-	-	15	-	The long term deployment projection for hydro is not consistent with the one given in other parts of the report (including ch 5)	we will use another figure to show transformation
McCormick (International Union for Conservation of Nature (IUCN))	11	99	22	99	27	-	-	-	"this sentence is long and awkward, and has a lot of errors; needs clarification"	will rewite this
McCormick (International Union for Conservation of Nature (IUCN))	11	99	30	99	30	-	-	-	and ___ how it might be stimulated -- needs something. Discusses?	agreed
McCormick (International Union for Conservation of Nature (IUCN))	11	99	29	99	29	-	-	-	and' after the semi-colon is not needed	will rewrite this
McCormick (International Union for Conservation of Nature (IUCN))	11	99	16	99	16	-	-	-	become	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	99	15	99	15	-	-	-	becomes	will edit
McCormick (International Union for Conservation of Nature (IUCN))	11	99	21	99	22	-	-	-	but policy will also has to ensure' -- too many lead ins to the sentence, needs to be fixed	will rewrite this

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
McCormick (International Union for Conservation of Nature (IUCN))	11	99	22	99	22	-	-	-	climate change mitigation AND energy security'	will edit
McCormick (International Union for Conservation of Nature (IUCN))	11	99	37	99	37	-	-	-	decentralized	Accepted
Kessels (International Energy Agency Clean Coal Centre)	11	99	34	99	35	-	-	-	Desertec has still to be built so cannot yet call it a successful development until it is built	talks of aspirations, but will clarify
McCormick (International Union for Conservation of Nature (IUCN))	11	99	20	99	20	-	-	-	do you need 'as well'?	Accepted
Nilsson (Lund University)	11	99	1	99	5	-	-	-	Does it really have to occur more rapidly, true? Second bullet sounds strange and should also recognise that RES also have externalities.	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	99	21	99	21	-	-	-	focused	will edit
McCormick (International Union for Conservation of Nature (IUCN))	11	99	5	99	5	-	-	-	internalize	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	99	38	99	38	-	-	-	maybe provide instead of represent?	will use if sentence stays
McCormick (International Union for Conservation of Nature (IUCN))	11	99	3	99	3	-	-	-	no 'because'	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	99	20	99	21	-	-	-	policy' is used twice in this sentence, not necessary	will edit
McCormick (International Union for Conservation of Nature (IUCN))	11	99	6	99	6	-	-	-	RE is used everywhere wlse, why not here? also, change to 'has great potential benefits', instead of 'have'	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	99	3	99	3	-	-	-	similar services TO other energy sources', not from	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	99	17	99	17	-	-	-	these niches, or this niche	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	99	14	99	14	-	-	-	what do you mean by 'different'?	will edit

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hongo (Japan Bank for International Cooperation)	11	99	-	-	-	11.7.2	-	-	I am afraid that 'A Strutural shift' provide a message to the readers that RE should be used more without any conditions. 'RE should be used more' is widely Accepted but pros and cons are there too. It is better to add such conditions too.	Accepted
Haum (German Advisory Council on Global Change)	11	99	-	-	-	11.7.2.1	-	-	"Section should address that structural shift is likely to produce ""loosers"" that need to be compensated. Leaving this aspect out makes section over-optimistic and in the end implausible"	this is a good point, and will be included
Bilello (NREL)	11	99	-	101	-	11.7.2.1 and 11.7.2.2	-	-	These two sections are heavily redundent, with large sections repeated word for word.	will be rewritten
McCormick (International Union for Conservation of Nature (IUCN))	11	100	21	100	21	-	-	-	analyze	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	100	38	100	38	-	-	-	business is the only one of these terms that is not plural	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	100	36	100	36	-	-	-	characterized	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	100	10	100	10	-	-	-	data? Or fact?	fact, but will rewrite if sentence/para stays
McCormick (International Union for Conservation of Nature (IUCN))	11	100	22	100	23	-	-	-	did they answer this question? If so, then 'they wanted to' is incorrect	will edit
McCormick (International Union for Conservation of Nature (IUCN))	11	100	34	100	34	-	-	-	does the situation call for a 'but'?	will edit
McCormick (International Union for Conservation of Nature (IUCN))	11	100	4	100	4	-	-	-	it can be argued	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	100	11	100	12	-	-	-	maybe 'may support the view that RE□'	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	100	2	100	2	-	-	-	missing a word -- 'may ___ within institutions'	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
McCormick (International Union for Conservation of Nature (IUCN))	11	100	20	100	20	-	-	-	no 'been' needed	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	100	33	100	33	-	-	-	of moving (space missing)	will edit
McCormick (International Union for Conservation of Nature (IUCN))	11	100	29	100	32	-	-	-	quotation without citation	from the bricolage or breakthrough paper, will ref
SCOWCROFT (EURELECTRIC)	11	100	4	-	15	-	-	-	Several places in chapter 11 there is an argument that incumbents somehow reduce the transformation. If the existing RE players turn into the new incumbants, the same argument apply.	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	100	26	100	26	-	-	-	stifling	will edit
McCormick (International Union for Conservation of Nature (IUCN))	11	100	17	100	20	-	-	-	this sentence needs work and clarification	agree will rewrite
McCormick (International Union for Conservation of Nature (IUCN))	11	101	30	101	30	-	-	-	"""energy system change AND are unlikely□"""	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	101	7	101	10	-	-	-	"combine bullets 1 and 2; semi colon after line 10"	We will rewrite this
McCormick (International Union for Conservation of Nature (IUCN))	11	101	25	101	25	-	-	-	AND small countries	Accepted
de Haan (Ernst Basler + Partner AG)	11	101	-	102	-	-	-	-	Boxes 2 to 12 are not referred to. The conclusions or common denominators listed on page 102 are too general and are, as such, not supported by the 12 individual, and very different, case studies in boxes 1 to 12.	we started to develop case studies but did not have time to place them: will do so for SOD
McCormick (International Union for Conservation of Nature (IUCN))	11	101	1	101	1	-	-	-	combinations of policies is awkward	We will rewrite this
McCormick (International Union for Conservation of Nature (IUCN))	11	101	33	101	33	-	-	-	i.e.,	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	101	33	101	33	-	-	-	i.e.,	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
McCormick (International Union for Conservation of Nature (IUCN))	11	101	34	101	34	-	-	-	OF how this has occurred	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	101	34	101	34	-	-	-	OF how this has occurred	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	101	9	101	9	-	-	-	recognizes	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	101	26	101	26	-	-	-	take out the A before structural shifts	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	102	6	102	6	-	-	-	-	No comment
McCormick (International Union for Conservation of Nature (IUCN))	11	102	9	102	9	-	-	-	-	No comment
McCormick (International Union for Conservation of Nature (IUCN))	11	102	10	102	10	-	-	-	-	No comment
McCormick (International Union for Conservation of Nature (IUCN))	11	102	12	102	12	-	-	-	-	No comment
McCormick (International Union for Conservation of Nature (IUCN))	11	102	13	102	15	-	-	-	-	No comment
McCormick (International Union for Conservation of Nature (IUCN))	11	102	3	102	3	-	-	-	100% what? RE? The sentence does not feel finished.	We will rewrite this
McCormick (International Union for Conservation of Nature (IUCN))	11	102	13	102	13	-	-	-	each other	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	102	3	102	3	-	-	-	I've noticed this elsewhere, as well□BUT at the beginning of a sentence seems awkward	We will rewrite this
McCormick (International Union for Conservation of Nature (IUCN))	11	102	3	102	3	-	-	-	I've noticed this elsewhere, as well□BUT at the beginning of a sentence seems awkward	see 861

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
McCormick (International Union for Conservation of Nature (IUCN))	11	102	5	102	5	-	-	-	jobs AND economic development	see 862
McCormick (International Union for Conservation of Nature (IUCN))	11	102	5	102	5	-	-	-	jobs AND economic development	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	102	27	102	28	-	-	-	Sentence suggestion: These two visions are presented to stimulate the reader to contemplate what sort of world they want to inherit.	We will rewrite this
McCormick (International Union for Conservation of Nature (IUCN))	11	102	26	102	27	-	-	-	take out 'required, and is indeed'. It is not necessary	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	102	23	102	23	-	-	-	tense agreement is off--either IMPLEMENTATION OF, or leave out implementing entirely	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	102	25	102	26	-	-	-	to make the move to a sustainable as easy□' A sustainable what?	Accepted
Hamilton (Chatham House)	11	102	-	-	-	11.7.2.3	-	-	Are you aware of the work that New Energy Finance has been doing, through a stakeholder process, on the concept of 'digital energy': data management/regulation/system integration/new players as energy shifts towards 'smart'/flexibile management of the power sector. As this is a more conceptual section it might be very relevant.	thank you - we will look at this
McCormick (International Union for Conservation of Nature (IUCN))	11	103	11	103	22	-	-	-	-	No comment
McCormick (International Union for Conservation of Nature (IUCN))	11	103	16	103	18	-	-	-	-	No comment
McCormick (International Union for Conservation of Nature (IUCN))	11	103	21	103	21	-	-	-	"commas after spillovers and renewables; punctuation before 'for example'"	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	103	22	103	22	-	-	-	AND manufacturing ability	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	103	7	103	7	-	-	-	Suggestion: policy makers AND governments face several key choices ON THIS ISSUE that will have□	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	103	7	103	7	-	-	-	Suggestion: policy makers AND governments face several key choices ON THIS ISSUE that will have□	Accepted

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	103	11	103	15	11.7.3	-	-	Add in the issue of strategic planning, optimisation and sequencing of decisions over underlying delivery infrastructure.	We will add this in
McCormick (International Union for Conservation of Nature (IUCN))	11	104	18	104	18	-	-	-	-	No comment
McCormick (International Union for Conservation of Nature (IUCN))	11	104	20	104	20	-	-	-	-	No comment
Uusivuori (Finnish Forest Research Institute)	11	104	-	-	-	-	-	-	"The chapter reviews interesting literature results concerning the effectiveness of using multiple instruments simultaneously. It reports that sometimes the most effective solutions are found by using multiple instruments. This raises the question whether the literature reports anything about risks of increased costs in cases where multiple instruments are not at their optimal levels as compared to costs in case a single instrument is set suboptimally."	this is a very interesting point. We intend to bring in this work from chapter 8
McCormick (International Union for Conservation of Nature (IUCN))	11	104	6	104	6	-	-	-	gotten rid of□	We will rewrite this
McCormick (International Union for Conservation of Nature (IUCN))	11	104	3	104	3	-	-	-	RE policies	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	104	27	104	27	-	-	-	that recognize	Accepted
McCormick (International Union for Conservation of Nature (IUCN))	11	104	7	104	7	-	-	-	to reduce risk AND to enable□'	Accepted
Nilsson (Lund University)	11	104	31	104	34	-	-	-	We do not know this for sure, do we? An electricity/hydrogen economy may not require important changes in societal activities, or? Beware of rhetoric!	We accept this and will be more careful about the way this is written
Hamilton (Chatham House)	11	104	11	104	12	11.7.4	-	-	In this first bullet point, R&D, Infra and RE deployment is a bit confusing (just a vocabulary issue as above). The importance of energy policy design to provide strong and effective investment conditions needs to be emphasised.	we will rewrite to emphasise this
Bilello (NREL)	11	105	-	109	-	-	-	-	"In general, are all of these examples really needed? Many do not really seem to fit the criteria of ""standard energy providers"". By giving too many examples, you water down the importance of those that really accomplish something. Nothing on Iceland?"	will review case studies and move
Kessels (International Energy Agency Clean Coal Centre)	11	105	-	108	-	-	-	-	Could be useful to integrate some of the boxes into the main text as examples especially the ones outside Europe	case studies will be moved and used as boxes where relevant or integrated into text

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
de Haan (Ernst Basler + Partner AG)	11	105	-	108	-	-	-	-	It seems possible to omit Box 1 to Box 12 without reducing the main messages and quality of reasoning of chapter 11. These Boxes basically come from a very limited number of literature references only and are very generic, and they run at risk of oversimplifying.	working to bring in more diverse case studies
Treber (Germanwatch)	11	106	1	-	-	-	-	-	"""... solar target from 1.8 GW to 20 GW (Mendoza, 2009)"". Please say if these GW are thermal or electric output."	Accepted
Devernay (Electricity of France - EDF Hydro Engineering Centre)	11	106	1	-	-	-	-	-	"Replace ""small hydropower"" by ""hydropower"""	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	107	-	-	-	-	-	-	It could be included one box reporting the successful experience of Brazil in the use of ethanol, with a blend between 20 to 25%, on top of the flex fuel cars running from 100% gasoline to 100% ethanol. References were mentioned in line 37 of this spreadsheet.	will consider adding information on Brazil
Bilello (NREL)	11	107	-	-	-	-	-	-	The boxes for Nepal and Bangladesh need more information to make them useful.	will add to them if keep; working to get information for additional/new cases
Sugiyama (CRIEPI)	11	109	-	-	-	-	1	-	Very good figure.	Accepted
Mu�oz (Pardee Center, Boston University)	11	-	-	-	-	11,4	-	-	review the use of NSE throughout the chapter. NSE is used as: (a) as claimed, meaning non-sustainable energy systems, and (b) implicitly as a synonym for fossil fuels and nuclear. When used as (b) it should be changed. In many occasions NSE is contraposed to RE, implicitly stating that RE are the only sustainable energy systems. this should be avoided, as it can be argued that fossil fuels and/or nuclear can be sustainable under certain conditions.	Context and comparison methodology
Branche (Electricit� de France (EDF))	11	-	-	-	-	-	-	-	"As far as I understood, large hydro is excluded from this chapter ; who has decided this issue ? why has this choice been made ? (it is a RES). It should be noted that what is important is the sustainability issue, whatever the size"	will work to integrate hydro
Hamilton (Chatham House)	11	-	-	-	-	-	-	-	"Chapter 11 is important for delivering the key themes of the report to policymakers. As such, it will benefits from being a bit more readable for policymakers, andd as practical and relevant as possible. The FOD is very good but some streamlining of the structure; greater attention to overall energy policy (particularly picking up key messages embedded in Ch8 concerning integration, strategic planning and network regulation); and attenion to vocabulary as raised in overarching comments. Vocabulary: appreciating that academic researchers approach renewable energy technology (development, deployment, diffusion), innovation policy, and infrastructure from different starting points, it is helpful to define very clearly the use of such terms and relate them as much as possible (where relevant) to the overall energy system. The reason is that different stages of technological development will attract different sources of finance and will require quite precise policies to incentivise investment and finance: development (R&D) looks very different from deployment (implementing e.g. wind or solar) from a financing perspective and the policies that will attract investment will also need to be very different to reflect the risk and return profiles at each stage. "	will revise to make clearer, provide stronger narrative, and will work to better define terminology

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	-	-	-	-	-	-	-	"I did not review the policy boxes; it might help explain what each one of these is illustrating, and set in any context of policy developments to ensure these are current at time of publication."	case studies will be incorporated into body of chapter
Dunn (GE Energy)	11	-	-	-	-	-	-	-	"I was impressed by the comprehensiveness of this draft chapter and thought it had relatively well-developed Executive Summary points. My high-level recommendations relate to 1) highlighting the importance of renewables-targeted policies beyond carbon price signals; 2) incorporating recent lessons learned from ""demand-pull"" policies (FIT/RPS); and 3) greater coverage of ""enabling"" policies such as permitting/siting and transmission/integration."	we take note
DE LA VEGA NAVARRO (National Autonomous University of Mexico)	11	-	-	-	-	-	-	-	"In this chapter the role of government is mostly seen in a way prior to the present crisis: limited to accompanying, to driving or to inciting private actors and markets, especially in matters related with innovation and technological change. Activities not attractive for market were also seen as reserved for governments. At the most, besides providing a supportive policy environment, it was Accepted that governments could also participate in funding, in elaborating fiscal policies, in supporting low-cost capital flows to private sector, and in the regulation of private activities in certain circumstances. In the present crisis, the need to prevent any drop in investment in fossil energies, at the same time that investment in alternate sources is not neglected, becomes a central concern to ensure that productive capacities are in place when the economy reactivates. The markets and private actors will not be enough to deal with all this: the state will have to continue to play a fundamental role. The deployment of new energy sources and technologies, for example, depends on the availability of new or revamped infrastructures that facilitate the transition not only to a cleaner, more diversified energy base, but also to a low carbon economy. This is a long term task in which the State will have to take strategic responsibilities. Taking into account preceding comments, I recommend to deep into following statements: Page 104 3 Governments are required to orchestrate the deliberate move from fossil fuels to RE use. Page 36 Besides the creation of markets that stimulate private 5 sector investment, and support for R&D, direct government intervention is needed in several 6 areas to help technologies move through several hurdles from the innovation phase to 7 commercial development. "	will address in introduction and 11.5

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Fulton (Deutsche Bank)	11	-	-	-	-	-	-	-	"Key improvement would be to map out the policy responses to scaling up renewables across maturity of technology and maturity of energy system and economy and widen this to system development i.e. grid and transmission issues. This would be a useful set of schematics that would frame the chapter. Showing more data about what different policies seem to have delivered and some case studies on different financing structures would help. Understanding the basics of what private markets are looking for - TLC: Transparency Longevity and Certainty - important to assess policy success. Source: DBCCA, ""PaSee SRREN_Draft0_Review_Fulton_Mark_Material_06.pdf. ying for Renewable Energy - TLC at the Right price,"" December 2009, see pages 15-16 (www.dbcca.com/research). Important not to confuse policy makers while being even handed, so carbon prices that could slope up or down might be confusing! Furthermore, climate change policy momentum is accelerating. Source: DBCCA, ""Investing in Climate Change 2010: A Strategic Asset Allocation Perspective,"" January 2010, see page 41 (www.dbcca.com/research). See SRREN_Draft0_Review_Fulton_Mark_Material_04.pdf"	a new figure or matrix is planned that will help with some of this. Will also be addressed in the text
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	-	-	-	-	-	-	-	"Objectives of the chapter: To what extent and in what way other sustainability goals should be weighed against large scale deployment of RE? Chapter affects as leaning towards an overriding goal for RE deployment (which would be untenable)".	more appropriate for ch. 9.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	-	-	-	-	-	-	-	"Sources Ignoring the missing references for the moment, the use of non-peer reviewed sources is quite abundant. The theme area of Ch_11 more or less necessitates the authors to use also other sources. Yet, only about 35% of the references concern peer reviewed journals. Probably a part of the referred books can also be regarded as peer reviewed, but that leaves still 55% ~ 60% non peer-reviewed sources. In the light of recent worries regarding reliability of sources and statements, this is a worrying share. Furthermore, of the peer-reviewed journal references (about 90 in this draft) about half comes from ONE journal only (Energy Policy). Admittedly Energy Policy is an important source and has a high issue frequency, but one would wish a broader evidence base. Quite some economic oriented peer-reviewed journals with (fairly) regular articles on decision making and market imperfections with respect to renewbales are not referred at all, e.g. Ecological Economics, Journal of Environmental Management & Economics, Energy Economics, Environmental Science and Policy, Transportation Research parts C and D, etc. etc. "	will edit and will endeavour to use as wide a peer reviewed set of literature as possible

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Perrels (Finnish Meteorological Institute (FMI) & Government Institute for Economic Research (VATT))	11	-	-	-	-	-	-	-	"Structure Section 11.7 has decisive implications for how deployment strategies can (or should?) be developed. Therefore, this section should be moved to the beginning, i.e. directly following the introductory section 11.1. It should also include the notion, that even though a strong expansion in deployment is necessary, it needs to include the systematic evaluation of trade-offs regarding all sustainability dimensions (social, economic, environmental). Many sections have predominantly a case wise approach, e.g. making section 11.5 far too long. This hampers the creation of synthesis throughout the chapter. It will be difficult for policy makers to understand what types of technical features cause particular types of problems in particular types of institutional environments and market structures. Some obstacles can indeed be relieved relatively simply, while others are not merely obstacles but are intrinsic to the current predominant technologies, their (market and institutional) maturity, etc. Removing obstacles in those cases will be a process of creative destruction, which needs careful management (e.g. regarding orientation of investments, notions of 'access', etc.) otherwise the destruction may overwhealm the creative part."	the structure was set by the IPCC Bureau and cannot be changed. However, some of these issues can be raised in the introductory section

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hamilton (Chatham House)	11	-	-	-	-	-	-	-	"Structure. The sections dealing with finance are currently located throughout the chapter due to the sub-heading definitions, however the actual integration/interaction between policy and financing needs streamlined, and I make suggesetions within comments below.But by way of illustration, 11.2.3 Financing Trends and implications for future growth; 11.4.4 Financing Barriers (which follows a section called 'policies to address market failures and barriers', and it could be that the separation between 'market barriers' and 'financing barriers' is somewhat artificial, given that) 11.5.3. Heating and Cooling has an investment section (11.5.2 Policies for Deployment - Electricity, and 11.5.4. Transportation do not have that sub-heading). The whole section 11.5.5.2 Policies to Finance Deployment and Infrastructure, outlines how finance works but follows the main policy sections and is not well integrated; as are 11.6.2 Addressing Risk and Uncertainty, and 11.6.3. Easing Access to Financing. In a policy-driven market such as renewable energy, finance and investment will be attracted by policy conditions - a point that is made clearly in this chapter, as such it may make more sense to consider preceding the main policy sections with a streamlined version of section 11.5.5.2, to outline how the financing parts work (with a description of risk and return) perhaps linked to the financing trends section, and then follow this with the discussion of various policies and market segments (electricity, heating & cooling, transport and infrastructure), in which financing issues can then be discussed, given that policy which intends to increase the proportion of renewable energy in those market segments will have to influence investment, therefore it is possibly more helpful to outline how financing works. "	Will do whatever possible to address, but difficult because different aspects of finance must be covered in relevant sections
Soliano Pereira (Universidade Salvador - UNIFACS)	11	-	-	-	-	-	-	-	"The chapter focuses too much on wind energy policies. It should be explored the case of countries which have succeeded high levels of renewable energy penetration based on hydropower, such as Norway, Brazil, etc.	will work to diversify regional and technological discussion and case studies
Nilsson (Lund University)	11	-	-	-	-	-	-	-	"The chapter is relatively weak on policy in other (non-RES policy) policy domains (e.g., land-use, agricultural, building regulations, permits, etc., i.e., what is here called ""enabling environment). It also feels rather unbalanced in being so unconditionally positive about RES, at times also stuck in old rhetoric about how bad things are for RES which does not agree with reality concerning growth of wind and PV. I think more balance would be good for credibility. Problems and drawbacks of RES and RES policy should also be mentioned."	Edits we're makiing should address comments on enabling environment and other issues. The report overall is adding more successful and unsuccessful cases.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Klessmann (Ecofys Germany)	11	-	-	-	-	-	-	-	"The quality of the chapter is already quite good, but its geographical focus could be more balanced. Some sections solely reflect and quote the European RE policy discussion, others solely the North American, instead of giving an overview of both. The perspective of other world regions is underrepresented. The terminology should also be more consistent (e.g. mention both European and American terminology)."	will address
Brunner (PIK)	11	-	-	-	-	-	-	-	"The quantity of information provided is enormous and I fear that the key messages somewhat drown in this ocean of statistics and case study examples. That's why I suggest to include a small box at the beginning of each sub-chapter (11.2;11.3;etc.) which very briefly summarizes the section's key policy implications. The Stern Review followed a similar approach and I think it's a sensible one whenever issues are treated in this all-encompassing manner."	for whole report. Will take into consideration. Should do in all SRREN if here.

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Hegde (Suzlon Energy Ltd)	11	-	-	-	-	-	-	-	"This is the outcome of the report and so for the greater impact and emphasis, this chapter could be re-organized. The first part could start with how much policy support and investments are required in speedy & large scale deployment of all 6 RE dealt in this report. The estimates can be a good guide for the subsequent parts. There are estimates to suggest approx. 500 Bln USD of investment by 2020 for achieving the desired CO2 reduction. The second part could condense the aspects of providing an overview of successful policy measures, funding mechanisms helping in deployment of RE technologies. RPS, FIT, Fiscal Incentives and CDM mechanism are clearly the main drivers and it is worth giving an emphasis on them. The third part could come out with what is really needed for large scale deployment of RE technologies. We appreciate the IPCCs philosophy of not recommending anything. However, these measures could be highlighted as being essentials for serving the end purpose of CO2 mitigation. We think the following measures would be worth emphasizing - Over 85% of the investment in the wind and other renewable sector has come from private sectors /businesses till date. Most of investment going forward too can come from the private sector, provided policy enablers are in place. While the RE sector is viewed as being driven largely by government subsidies, people fail to recognize it is our inability to price carbon and factor it into electricity prices for conventional energy. This factor could provide the same level playing field. There are 6 critical elements in promoting the sector: a. Aggressive, mandatory RPS ☐ 20% share for renewable energy by 2020 making it as a global mandate b. Feed-in-tariff factoring cost escalations c. Reform and continuation of CDM mechanisms d. Create a conducive financial environment ☐ through bring in predictability in RE policies and commitment towards mandatory CO2 reduction. Under such scenarios, the banks and financial institutions would automatically commit to lending as they will see significant opportunities. e. Investments in grid upgradations and related infrastructure. f. Single window clearances for entire cycle starting from land acquisition, permitting and up to transferring power to the grid. Each element requires emphasis and evidence."	The structure was set by the IPCC Bureau and cannot be changed. In addition, we cannot include prescriptive language in the report, but we will use whatever is available in the peer-reviewed literature

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
Caneill (Electricit&#65533; de France (EDF-SA))	11	-	-	-	-	-	-	-	"This section addresses policies and measures suitable fo favour renewables energy emergence. A serie of report published by WBCSD have addressed for the electricity sector these issues including the renewables energy. I provide the references as I think that this piece of work could be quoted in SRREN : The final report of the Electricity Project was published in 2008 and is called : Power to Change : A business contribution to a low-carbon electricity future"	will consider for 11.5
Mu&#65533;oz (Pardee Center, Boston University)	11	-	-	-	-	-	-	-	Avoid unnecessary references to nuclear and fossil fuel energy sources. In many instances comparisons are gratuitous.	Accepted
Sugiyama (CRIEPI)	11	-	-	-	-	-	-	-	Benefits of renewable, including job creation, energy security, industrial development and others, have to be quantified to discuss appropirate levels of governmentral subsidies.	Wei, M., Patadia, S. and Kammen, D. M. (2010) "Putting renewables and energy efficiency to work: How many jobs can the clean energy industry generate in the U. S.?" *Energy Policy*, **38**, 919 - 931.
Yamaguchi (The Institute of Energy Economics, Japan)	11	-	-	-	-	-	-	-	Don't we need to touch upon the energy-balance (Balance of supply/demand and energy mixture) in connection with chapter 8?	will be addressed in 11.5 integration policies section
Brunner (PIK)	11	-	-	-	-	-	-	-	First of all, I'd like to congratulate the authors for the revised chapter. I believe that it gained considerably in quality and clarity since the zero order draft. I only have very few comments.	Accepted
Soliano Pereira (Universidade Salvador - UNIFACS)	11	-	-	-	-	-	-	-	From the introduction, when the ""enabling environment"" is first conceptualized, it must be made clear that such an environment does not need to be set before any policy is put in place, as mentioned later in the text. It would avoid giving to some policy makers that the elaboration of a RE policy is a very complex process in which is necessary to manage a series of intangible aspects.	agreed and will address in 11.1 and 11.6
Kammen (University of California, Berkeley)	11	-	-	-	-	-	-	-	Fuller, M, Portis, S. and Kammen, D. M. (2009) "Towards a low-carbon economy: municipal financing for energy efficiency and solar power", Environment, 51 (1), 22 &#65533; 32.	not a comment, but will review
Kessels (International Energy Agency Clean Coal Centre)	11	-	-	-	-	-	-	-	General comment: Chapter 11 focuses mostly on Europe with little on other parts of the globe and most examples taken from European countries. I would suggest reducing this and using case studies from other parts of the globe.	working for better geographical diversity
contaldi (ISPRA, Institute for Environmental Protection and Research)	11	-	-	-	-	-	-	-	General comment: I found this chapter very accademic. Para 11.2, 11.3 and 11.4 repat informations and concepts better discussed in the tecnological chapters and can be dropped.	will revise and try to delete text that repeats earlier information

Name (Institute)	Chapter	From page	From line	To page	To line	Section	Figure	Table Info	Comments	Considerations by the writing team
SCOWCROFT (EURELECTRIC)	11	-	-	-	-	-	-	-	General: The chapter should focus less on technology and more on other factors, giving emphasis to the role of companies (both as institutions, knowledge centres and source of financing). The discussion should focus on different stages of development, so as not to say that Germany and India has the same kind of challenge or solution to RES. The discussion on FIT/RPS is at least 5 pages too long. The chapter could focus more on mitigation as the target, and reduce the discussion on green jobs etc (as they do not nessecarily work in the same direction), and split the green jobs arguments between those resulting from investments and first-mover advantages in the supplier industries (not a target to build a supplier industry in each country deploying RE). The role of electricty markets and long term compliance with the normal working of these markets and RE. The role of learning curves on a global scale could be reflected in the discussion on technology. Long term goal of internalising externalities, so that RE is financed through ordinary market mechanisms.	revising text to reduce FIT/RPS discussion; other input will be addressed to the extent possible
Bilello (NREL)	11	-	-	-	-	-	-	-	I personally found the writing here to be WAY too theoretical and disengaged. Outlining the theoretical framework at the beginning of each section is fine (and preferred), but too many of the subsections focused only on theory and failed to give real-world information. Significant rewriting is required to make this an engaging and useful chapter.	will work to improve language and readability
Kyte (E.ON AG)	11	-	-	-	-	-	-	-	It would be useful to get an overview of schemes, their barriers and advantages and an assessment of success.	will attempt to do this through some of the case studies
Nilsson (Lund University)	11	-	-	-	-	ES	-	-	"Needs polishing. F.x. line 24: ""Well-designed policies are more likely to emerge in an enabling environment□"" Later in the chapter it seems like ""enabling environment"" is actually (partly) the result of policies. Is it possible to have a more stringent taxonomy around governance, policy, policy instruments? "	Accepted
Nilsson (Lund University)	11	-	-	-	-	ES	-	-	Line 21-23: Note niche markets?	will consider as we revise ES
NADAI (CIRED)	11	-	-	-	-	Executive Summary	-	-	EXECUITVE SUMMARY PAGE/ 1. the role of the finance community seems ot not be abit underplayed int he summary as compred to its place in the chapter. One of the key message is abt articulation of finance community and public policy so that the public support of policie to RE can be converted intodemultiplicated financial support to RE deployemtn by finance community . 2. The fact that place such as cities or countires have already made structural shcift should be at least mentioned.	we try to do this
Soliano Pereira (Universidade Salvador - UNIFACS)	11	-	-	-	-		-	-	The concept of ""enabling environment"" is left too theoretical. In order to be more tangible and consolidated, it would be commendable to analyse the five dimensions of the concept in the case of two success stories advocated along the text, such as Germany, Denmark or Spain, for example.	will highlight a case that is already in the report
Praessler (PIK)	11	?	-	-	-	11.1 4.3	-	-	Section is content-rich and contains good citations. Maybe a bit long in relation to others, potential for shortening to be assessed.	no such section, so don't know what this refers to, but we will streamline where possible.