

Biomass role in achieving the Climate Change & Renewables EU policy targets. Demand and Supply dynamics under the perspective of stakeholders . IEE 08 653 SI2. 529 241

Interactions with policy makers and the stakeholders

Deliverable D5.9

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Preface

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In this publication the interactions with policy makers and other relevant stakeholders on modelling input data & assumptions are presented.

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Introduction

In the course of the Biomass Futures project four teleconferences, two modelling workshops and a number of policy workshops have been organised to involve policy makers and other relevant stakeholders in every step of the project. For WP 5 the most important interactions that took place are listed below.

- Modelling workshop with the Green-X colleagues
- Workshop on 26 November 2010
- AEBIOM workshop on 29 June 2011
- Teleconference with the demand stakeholders
- Meeting of the project coordinator with the coordinator of Green-X early December 2011 to discuss scenarios complementarity (Biomass Futures & Biobench)
- Meeting organised on 7 March to discuss the policy conclusions of the modelling work
- Final conferences on 20 March 2012

A brief overview of the workshops and interactions with the stakeholders are presented in the following chapters. The draft agenda of each workshop and the list of attendees are presented in the Annex.

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Overview of the workshops

2.1 Modelling workshop with Green-X

On 27 January 2010 ECN organised a workshop and invited Green-X team to discuss the modelling activities concerning bioenergy production. In general, a fruitful knowledge and data exchange was established, facilitating a mutual learning process among all involved parties. Gustav Resch presented the current state of the Green-X model and the bioenergy section of the 20% by 2020 balanced scenario model run. Issues related to the competitive use of biomass resources and how to include imports and trade in modelling have been discussed.

2.2 Workshop to discuss demand for biofuels

On 26 November 2010, a workshop was organised to present the demand set out in the available NREAPs, summarize the implications in terms of future EU land use of expanding biomass demand, present the supply of biomass for energy in Europe, and finally combine these results with anticipated models describing the EU energy demand. ECN presented the status of biomass allocation in the model and the scenarios planned to be constructed.

2.3 Workshop on biomass role in the RED2020 energy future

This workshop was organized on 29 June 2011, as part of the AEBIOM conference in Brussels. The aim of the workshop was to set the scene for biomass in the different modelling tools, present & analyse the scenarios developed within the Biomass Futures project and discuss key policy messages for the implementation of RED.

ECN presented the scenarios constructed within the project and how biomass was treated in RESolve model kit. We received some valuable comments to tailor our model runs. Based on the feedbacks received a third scenario “ high biomass scenario” was included in the model runs.

2.4 Teleconference with policy stakeholders

Scenarios for future biomass market penetration were discussed at a teleconference with demand and policy stakeholders on 20 September 2011. A draft policy briefing D6.4 “Introducing the Biomass Futures scenarios” was sent to the stakeholders prior to the meeting. Participants from DG ENER, IEA, ePURE, WIP, Technical University of Vienna, Abengoa, Toyota and Romania Agriculture Ministry provided their comments for the scenarios described in the policy brief.

In general the reference scenario was very well received as it reflects the actual circumstances. It was considered as a good base case scenario.

The sustainability scenario was also well received. However, more details on the construction of the scenario were requested. How to treat iLUC effect has been the centre of attention. A better description of the ILUC methodology & the sustainability criteria within the modelling activity was needed.

The third scenario “ Global transition” have been heavily criticised as the participants found it very theoretical. This scenario was considered to be beyond the aim of the Biomass Futures project.

This teleconference played an important role in defining the scenarios. Based on the feedbacks the sustainability scenario has been more detailed and the global transition scenario was abandoned.

2.5 Workshop to validate final results from the demand analysis

On 7 March 2012 a meeting was organised at ECN, in the Netherlands. The purpose of the meeting was to discuss and validate final results from the demand analysis together with Biomass Futures partners and selected external demand stakeholders. 7 participants from ECN, one from TU Vienna, a colleague from Oeko and another colleague from Altera participated to this workshop.

In this workshop, detailed outcomes of the modelling work has been presented and the participants were requested to provide their critical comments. In the end a session was dedicated for defining the main policy conclusions. Each participant was requested to give his/her policy conclusion. The policy conclusions are collected and discussed with the project partners after this workshop. The policy conclusions received from the stakeholders are listed below.

1. Policy conclusions

a. European

- RE Directive definitions impact the developments of renewable electricity, heat and transport sectors. This is not always good. (this conclusion is related to the final energy counting rule- this rule favours the heat sector)

- NREAPS provide policy guidance for RE development but nothing more
- Some countries have to reconsider their NREAP biomass targets
- Current policies do not seem enough to meet NREAPS
- Biomass potential is not the barrier to meet NREAP demand, but the current policy incentives.
- Several MSs need to intensify their policies to achieve NREAP targets .
- For designing efficient and effective policy it is important to have an idea of costs and benefits of everything.
- Scenarios investigated show the need for additional policy intervention to let biomass play its role as expected in NREAPs.
- Double counting has negative effects on the long run for sustainability.
- Mismatch between NREAP targets and bioenergy potentials.
- Domestic potential is not exploited if no additional stimulation is put in place at the time of analysis.

General comment: all above mentioned conclusions are in the same line. There is a large amount of potential. However, utilizing this potential will require stronger incentives than the ones that are presented in NREAPs. Present policy incentives will not always lead to the most sustainable use of biomass resources.

b. Global policy

- Import of biomass is likely to remain very important for meeting 2020 targets.
- Try to agree on policy worldwide. If not, perverse effects of one region fill in gaps of the other region.

2. Sustainability

- Stricter sustainability criteria have a large effect on biogas and bioliquids production and related sustainability effects
- Heat from solid biomass is not affected by change of scenario(change of sustainability)
- Sustainability criteria will require 1) important increase in 2nd gen. biofuels, 2) imports, to meet the biofuels demand.
- Sustainability scenario cannot be limited to domestic potential

General comment: Sustainability criteria should be treated equally (both for domestic and imported) otherwise there will be perverse effects outside the EU.

3. Technology

- SNG might play an important role after 2020
- FT diesel in 2015 seems too optimistic from a technological development perspective and from the perspective of competing technologies based on woody (mostly) imported feedstock (e.g. SNG based on eucalyptus from Brazil and perennials from Ukraine).
- Structural changes in heat sector will influence the biomass utilization within the sector.
- Which technology(ies) would be most sensible to develop.
- Technology development time(growth rate) is crucial
 - Capex subsidy instead opex sub. (meaning it is more efficient to subsidize the technology development rather than the RES product)
 - Find transition

General comment: technology development is particularly important in terms of efficient use of resources and the utilization of domestic feedstocks.

4. Resource efficiency

- Energy demand reduction remains very important, as well as efficient use of biomass resources. Use it in the most efficient way.

5. Key factors

- Implementation of cross-border cooperation mechanisms may change the picture completely(e.g. trade electricity produced from biomass instead of trading raw biomass).
- Key factors influencing future biomass use are i) sustainability criteria EU or global, ii)link to other markets for feedstocks, iii) developments in heat market, iv) role of import
- Sustainability criteria affect domestic biofuel production significantly, for other sectors impacts are less pronounced.

2.6 Final workshops

Lunch Workshop– Designing Policy to meet Europe’s Future Bioenergy Needs – How can the Biomass Futures project inform future European bioenergy policy?

On 20 March 2012, a lunch workshop was organized at the European Parliament. This workshop was intended to offer policy makers the opportunity to examine outputs from the project and importantly help tailor results prior to finalisation.

The workshop attracted many attendees’ (more than 40) and at the end of the workshop a lively and fruitful discussion took place.

Workshop - The role of biomass in meeting a diversified demand – Sharing final results from the Biomass Futures project

The same day more detailed results of the project and the modelling work has been presented to the stakeholders. This workshop was intended to inform stakeholders from industry, supply & sustainability sides on the final outputs from the project regarding to the role of biomass in meeting a diversified demand.

Appendix A. Modelling workshop

Draft agenda

Wednesday, 27 January 2010

Place: Radarweg 60, 1043 NT Amsterdam

Meeting room 01.17

Tel: 0031 (0)6 10955081

Agenda

9:30-9:35	Welcome by the chair	Paul Oosterkamp
9:35-10:00	Introduction to the meeting	Ayla Uslu
10:00-11:00	Current state of the Green-X model and the bioenergy section of the '20% by 2020 balanced scenario' model run results	Gustav Resch
11:00-11:30	Questions and answers session 1	All
11:30-11:45	Coffee break	
11:45-12:15	Biomass Allocation	Jan Ros
12:15-13:00	Lunch break	
13:00-13:45	Presentation of the ECN models "RESsolve-T and -E"	Joost van Stralen
13:45-14:15	Renewable H/C model	Joost van Stralen
14:15-14:30	Coffee break	All
14:30-15:00	Question and answers session 2	
	End of the session	

Participants

Participants name	Organisation
Ayla Uslu	ECN
Joost van Stralen	ECN
Luuk Beurskman	ECN
Paul van der Oosterkamp	ECN
Jaap Jansen	ECN
Jan Ros	PBL
Gustav Resch	TU Vienna

Appendix B. Workshop on 26 November 2010

Agenda

the Institute for European Environmental Policy (IEEP), Brussels

Chair – Pernille Schiellerup, Head of Climate and Energy Programme, IEEP

Project coordinator and lead – Calliope Panoutsou, Imperial College London

Time	Details
11:00 – 11:15	Coffee and registration
11:15 – 11:30	Introduction to the Workshop, its purpose and the analysis being undertaken within Biomass Futures – Calliope Panoutsou, Imperial College London
11:30 – 11:50	Bioenergy Use in the EU Member States – Cumulative Projections from the NREAPs and the associated implications – Bogdan Atanasiu, IEEP, Climate and Energy Expert
11:50 – 12:10	Future land use demand in Europe – Expectations for the use of agricultural land into the future and the potential indirect land use impacts of expanded demand – Ben Allen, IEEP, Agriculture and Land Use expert supported by Bettina Kretschmer, IEEP, Climate Change and Agriculture expert
12:10 – 12:30	Discussion regarding the implications of the findings from the NREAPs, the limitations of EU land use and anticipated consequences.
12:30 – 13:00	Lunch and continued discussions
13:00 – 13:20	Biomass supply in EU27 – Berien Elbersen, Wageningen UR
13:20 – 13:40	Sustainability issues affecting biomass supply – Uwe Fritsche, Oeko-Institut
13:40 – 14:10	Discussion on the implications associated with supply of EU bioenergy demand, and additional issues to take into consideration
14:10 – 14:30	How will EU demand for bioenergy be structured – presentation of modelling approach and scenario assumptions – Joost van Stralen, ECN
14:30 – 14:50	Discussions bringing together the questions of bioenergy demand in Europe, its delivery and consequent supply implications
14:50 – 15:00	Chairs conclusions and next steps for biomass futures
15:00 – 15:30	Optional – Coffee, cake and an opportunity for further discussions with the presenters

Appendix C. AEBIOM workshop on 29 June 2011

Agenda

Chair: Kyriakos Maniatis, European Commission, DG Energy

- Imperial College London, Calliope Panoutsou
→ Biomass Futures: Defining the role biomass will play in the heat, electricity and transport sectors for 2020
- TUV, Gustav Resch
→ Biomass in GREEN-X model
- ECN, Ayla Uslu
→ Scenarios for biomass' role in a low carbon future
- ICCS, Mary Nezi & Pantelis Capros
→ Biomass in the PRIMES model
- ECN, Joost van Stralen
→ Biomass in RESsolve
- Discussion: Key policy messages.
Additional invited institutions :

- EC DG Energy
- EC DG Enterprise
- EC DG Agriculture
- EC DG Research

Appendix D. Teleconference with the demand stakeholders

Participants

	Name	Organisation	Contact Details
1	Fanny-Pomme Langue	DG ENER	fanny.langue@ec.europa.eu
2	Kyriakos Maniatis	DG ENER	Kyriakos.Maniatis@ec.europa.eu
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4	Gloria Gaupmann	epure	gaupmann@epure.org
5	Rainer Janssen	WIP	rainer.janssen@wip-munich.de
6	Gustav Resch	Techn. Univ. Vienna / GreenX	resch@eeg.tuwien.ac.at
7	Marta Vasquez	Abengoa	marta.vasquez@bioenergy.abengoa.com
8	Dorothee Lahaussois	Toyota	Dorothee.Lahaussois@toyota-europe.com
9	Speranta Neagu	Agriculture Ministry, Romania	speranta.neagu@madr.ro

Appendix E. Meeting organised on 7 March 2012

Agenda

Location: Radarweg 6, 1043 NT Amsterdam

Chairman's welcome	Berien Elbersen	11.00-11.10
Introduction to the Biomass futures project	Ayla Uslu	11.10-11.30
Introduction to the modelling work and the scenarios	Ayla Uslu	11.30-11.50
Evaluation of the NREAP* bioelectricity demands-Overview of the models and the main outcomes of the RESolve-Electricity model	Joost van Stralen	11.50-12.30
Lunch break		12.30-13.30
Evaluation of the NREAP bioheat demands - Main outcomes of the RESolve-Heat model	Luuk Beurskens	13.30-14.00
Evaluation of the NREAP biofuel demands- Main outcomes of the RESolve-Transport model	Joost van Stralen	14.00-14.30
Discussions		14.30-15.30

*NREAP: National Renewable Energy Action Plans

Participants

	Name	Organisation	Contact Details
1	Ayla Uslu	ECN	uslu@ecn.nl
2	Marc Londo	ECN	londo@ecn.nl
3	Joost van Stralen	ECN	vanstralen@ecn.nl
4	Luuk Beurskens	ECN	Beurskens@ecn.nl
5	Francesco Dalla Longa	ECN	dalla@ecn.nl
6	Martine Uyterlinde	ECN	uyterlinde@ecn.nl
7	Bram van der Drift	ECN	vanderdrift@ecn.nl
8	Berien Elbersen	Alterra	Berien.Elbersen@wur.nl
9	Uwe Fritsche	Oeko	U.Fritsche@oeko.de
10	Gustav Resch	TU Vienna	

Appendix F. Final conferences

Date – 20 March, 12.30 – 14.30 (including a light lunch) with subsequent time for further discussions
 Location – European Parliament, Building: Altiero Spinelli, Room: A5E-1, (60, rue Wiertz, 1047 Bruxelles)
Agenda

Chair – Claude Turmes, MEP (the Greens/EFA Group) Time	Details
12:30 – 12:40	Registration
12:45 – 12:50	Welcome by the Chair
12:50 – 13.05	Bioenergy policy maps and gaps – Bettina Kretschmer, IEEP
13.05 – 13.20	Atlas of biomass supply for 2020 & 2030 – Berien Elbersen, Alterra / Hannes
13:20 – 13.35	Bioenergy markets: How much of the demand for heat, electricity/ CHP can be met by sustainable biomass supply? Results from alternative bioenergy demand scenarios for 2020 and beyond – Ayla Uslu / Joost van Stralen, ECN
13.35 – 13.50	Supplying sustainable bioenergy: The Biomass Futures sustainability indicators – Uwe Fritsche, Oeko-Institute
13.50 – 14.05	How can Biomass Futures results assist the bioenergy policy agenda? – Calliope Panoutsou, Imperial College London
14.05 – 14.15	Conclusions
14.15 – 14.45	Discussion time – An opportunity to engage with the presenters

Detailed Agenda

Chair – Dirk Carrez, CleverConsult

Time	Details
15:00 – 15:30	Bioenergy markets: Allocation of biomass input to the EU for the heat, electricity/CHP & transport sectors Calliope Panoutsou, Imperial College London
15:30 – 16:00	The role biomass can play for 2020 & 2030: Deviations & consistency with NREAPs Ayla Uslu / Joost van Stralen, ECN
16:00- 16:30	Coffee break & Discussion
16:30-17:00	Sustainable biomass supply: Availability & constraints across EU Member States and from outside the EU Berien Elbersen/ Alterra, Hannes Bottcher/ IIASA & Uwe Fritsche/ Oeko-Institut
17:00-17:30	Cascading Use: A Systematic Approach to Biomass beyond the Energy Sector Bettina Kretschmer, IEEP
17:30- 18:00	Discussion & Conclusions

Attendees policy workshop March 2012

Name	Organisation
1 Calliope Panoutsou	Imperial College
2 Bettina Kretschmer	IEEP
3 Ayla Uslu	ECN
4 Uwe Fritsche	Oeko-Institut
5 Berien Elbersen	Alterra

6	Hannes Boettcher	IIASA
7	Claude Turmes	European Parliament, MEP (The Greens)
8	Martina Högberg	SE Permanent Representation of Sweden to the EU
9	Dirk Carrez	Clever Consult
10	Luc Pelkmans	VITO NV
11	José Riesgo Villanueva	European Commission, DG ENER
12	Alison Fraser	Office Julie Girling, MEP
13	Fiona Hall	European Parliament, MEP (ALDE)
14	Vittorio Prodi	European Parliament, MEP (ALDE)
15	Ana María Bravo-Angel	Dupont Industrial Biosciences
16	Speranța-Liliana Neagu	RO Ministry of Agriculture and Rural Development General Directorate for European Affairs and International Relations
17	Line Andersen	Burson•Marsteller
18	Victoria Borthwick	Partners for Euro-African Green Energy (PANGEA)
19	Rob Arnold	UK DECC
20	Alessandro Agostini	European Commission - Joint Research Centre (Petten), Institute for Energy and Transport, Cleaner Energy Unit
21	Marc Perrin	GDF Suez
22	Silvia Vivarelli	Executive Agency for Competitiveness and Innovation(EACI)
23	Emilio Font de Mora	Executive Agency for Competitiveness and Innovation(EACI)
24	William Gillett	Executive Agency for Competitiveness and Innovation(EACI)
25	Fanny-Pomme Langue	European Commission, DG ENER
26	Eerika Albrecht	Partners for Euro-African Green Energy (PANGEA)
27	Cecilia Luetgebrune	Deutscher Bauernverband
28	Zoltan Rakonczay	European Commission, DG ENV
29	Virginie Rimbart	European Commission, DG RTD
30	Giuseppe Nastasi	Client Earth
31	Stephen Grady	UK JNCC
32	Mindaugas Stonkus	LT Ministry of Energy of the Republic of Lithuania
33	Barry Magee	ePure
34	Dorothee LAHAUSSOIS	Toyota
35	Ilias Prevezas	Office of Kriton ARSENIS, MEP
36	Jan Haers	BE Flemish Energy Agency, Belgian Permanent Representation to EU
37	Andreas Pilzecker	DG AGRI
38	Rob Cornelissen	NL Ministry of Infrastructure and the Environment
39	Joanna Ciesielska	Bellona Europa
40	Christine Stiehl	BASF
41	Femke DE JONG	Office of MEP Bas Eickhout
42	Jonna Gjaltema	Office of MEP Bas Eickhout
43	Ulrich Leberle	CEPI
44	Arnaud Duviolguerbigny	COGEN Europe