Workshop Mobilizing Sustainable Biomass chains

16 and 17 October 2018, Amsterdam Introduction

Eric van den Heuvel / Loes Knotter

Introduction

- The Occasion
- Framing the Urgency
- Challenge
 - Set Up
 - Methodology
 - The Casus
 - Presentation Teams
 - Rules of the game

The Rationale •

 Dutch Government targets 49% reduction of GreenhouseGas emissions in 2030



The Rationale

- Dutch Government targets 49% reduction of GreenhouseGas emissions in 2030
- Platform Sustainable Biofuels involved in process
 - **Conclusion of analysis:**
 - One third renewable energy in transport needed in 2030
 - ± 100 PJ renewable fuels
 - ± 35 PJ renewable electricity





The Rationale •

- Ministry of Economic Affairs assesses biomass share in 2016:
- 115-753 PJ

Perspective according to Min. EZ in 'Biomassa 2030'

EZ in 2016:

max 753 PJ

115 PJ

"Biomassa 2030 - Strategic vision for the application of biomass towards 2030:

 Possible availability of non-food biomass¹ for application in NL, based on global non-food supply of 50-150 EJ:

• 115 - 753 PJ

 Application of 100 PJ sustainable biofuels fits in these numbers. Serious effort is neede to organise supply of sustainable biomass feedstocks - also necessary for transition in chemistry and other sectors

1) non-food biomass: biomass available for electricity, heat, transport fuels and feedstocks for chemicals and materials

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PBL in review of '1st Carbon Sketch' of Climate agreement

- Demand in 2030 in various sectors: 340 - 570 PJ
- Possible share in 2050: 600 PJ

Planbureau voor de Leefomgeving	0			
ANALYSE VAN HET VOORSTEL VOOR HOOFDLIJNEN VAN HET KLIMAATAKKOORD				
Michiel Hekkenberg en Robert Koelemeijer (eds) 28 september 2018				
	T .			
Driven by Nature.				

Framing the urgency



Framing the urgency

Climate change

We have 12 years to limit climate change catastrophe, warns UN

Urgent changes needed to cut risk of extreme heat, drought, floods and poverty, says IPCC

• Overwhelmed by climate change? Here's what you can do

Jonathan Watts Global environment editor Mon 8 Oct 2018 07.23 BST



KLIMAATZAAK TEGEN DE STAAT

Op 24 juni 2015 won Urgenda, samen met met 900 mede-eisers, de Klimaatzaak tegen de Nederlandse Staat. De rechter droeg de Staat op de uitstoot van broeikasgassen in 2020 met 25% te verminderen ten opzichte van 1990. De Staat tekende beroep aan tegen dit vonnis. Op 9 oktober bekrachtigde het Haagse Hof het vonnis van de rechter.

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Framing the challenge



Current economy still very much linear based to serve the seven main societal needs

Source: The circularity gap report 2018

Set Up of workshop

- Free exploration of possibilities
- From a plausible future context:
 - Fossil free
 - Circular
 - Biobased
 - Challenging assumptions
 - Reinvented the definition of 'workshop'
 - Alternating process in Group and in Teams

Methodology ^o

Concept op Design Thinking:

- Finding the right questions
 - Discovery of collective knowledge
 - Identifying hidden needs
 - Determine relevant data
 - Reflecting on findings by using different lenses

- Focus on possibilities
- Formulating design parameters
- Sketching set of solutions
- Shaping the perfect context for the idea
- Finalizing concepts
- External sharing for further progression

The Casus

- How to build sustainable biomass supply chains to serve various functions?
- How to provide sufficient biomass in a sustainable way in a fossil-free, biobased and circular economy?

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How boils this down to today's opportunities?

Embrace the complexity

Design parameters for sustainability

- Strive for high well-to-wheel GHG-emission reductions
- Avoidance of undesired land change impacts
- Increase of (re)forestation and protection of forests, nature and biodiversity
 - Contribution to improvements to more efficient agriculture
- Strengthening food security
- Improving soil and water quality and closing of nutrient cycles

- Assuring security in the supply chain
- Improving transparancy

Presentation of teams

Team 1	Team 2	Team 3	Team 4	Team 5
Ausilio Bauen Karlijn Arts Rein Coster Iago Dominguez Teres Kees de Gooijer Bart Strengers	Dorette Corbey Wibke Baumgarten Frank Bergmans David Chiaramonti Joop Groen Paul Sinnige	Carlo Hamelinck Eric Evers Eric van den Heuvel Gisle Johansen Aldert van der Kooij Anton Robek Marieke van de Werf	Eelco Dekker Ric Hoefnagels Jaap Kiel Loes Knotter Johanna Mossberg Gert-Jan Nabuurs	Luc Pelkmans Karin Blaauw Carla Chidichimo John Grin Hans Langeveld Patricia Ossewijer Hennie Zirkzee

The Rules of the game

- The workshop is a safe place:
 - People take care of each other
 - Mistakes and bold statements are possible
- The Chatham House rules apply:
 - Quoting is allowed, without disclosing the person quoting
- Tone of voice and contribution is constructive
 - Use 'challenge' over 'problem'
 - Add 'yes, and' in conversation
- Share via your preferred channels use #BioMob or #DrivenbyNature

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Source: The circularity gap report 2018

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