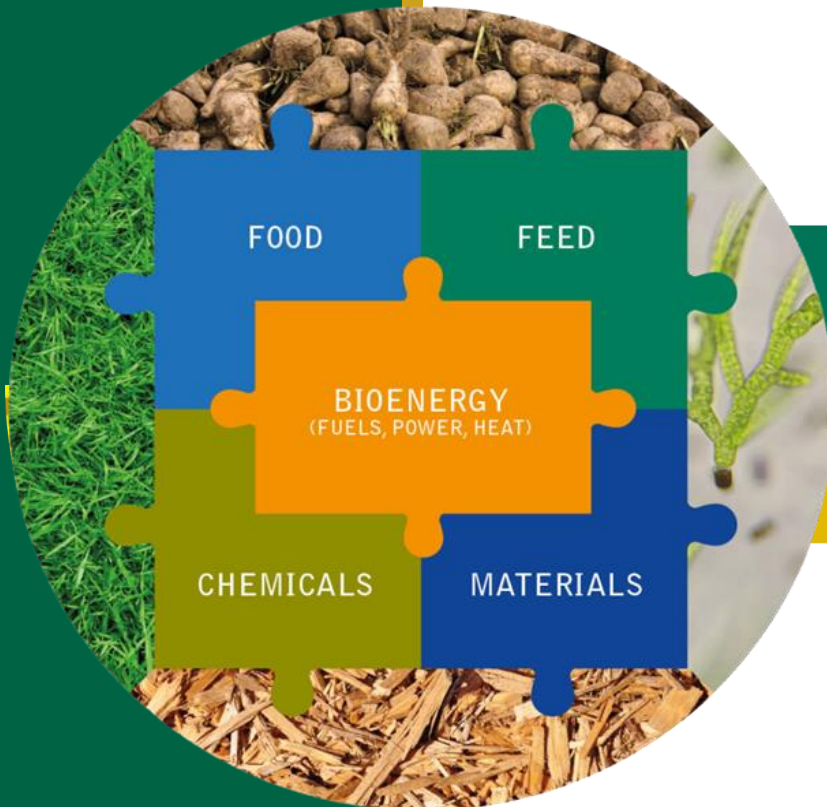


Intro, agenda and process for today



René van Ree

Coordinator IEA Bioenergy Task42
Wageningen Food and Biobased Research

Joint Thematic Workshop on Bioenergy and
Biorefining in a Circular (BIO)Economy,
Brussels, 27 September 2017

Roundtable – who is who?

Agenda for this meeting*

9:30 – 10:00	Arrival, coffee/tea
10:00 – 10:30	Introduction meeting & short intro partners
10:30 – 12:30	15 min partner presentations on running/planned activities and cooperation opportunities IEA Bioenergy Task42; IEA Bioenergy, ETIP Bioenergy, EERA Bioenergy, IRENA, FAO (EC DG JRC, OECD, DOE)
12:30 – 13:30	Lunch
13:30 – 15:00	Analysis and identification cooperation opportunities Roundtable discussion to identify overlapping activities, white spots, and options for cooperation. The info from the presentations given before lunch will be taken as starting point. Form: individual specification (flapover) with plenary discussion.
15:00 – 15:15	Coffee/tea (T42 will summarise major issues on a single flapover)
15:15 – 16:00	SMART appointments and follow-up Joint activities next 12-18 months, joint knowledge dissemination event(s), ...

*The slides of this meeting will be send to all invited attendees. The results of this workshop will be summarised in a short draft report that will be send to all for last comments and remarks. The final report will be send to all and published on the website of IEA Bioenergy (Task42).

Intro

Bioenergy, Biorefining, Circular Economy and BioEconomy are important areas of attention within the work programmes of various national, European and international organisations, like:



Government of the Netherlands



Are there any options to cooperate?

- Efficient use of resources
- Broad support of results



Task42 - Biorefining in a Future BioEconomy

Aim of this meeting

1. To inform each other on running and planned activities in the field of Bioenergy and Biorefining in a Circular (Bio)Economy;
2. To analyse cooperation opportunities to be able to use available (financial) resources as efficient as possible and to come-up with results that will have a broad support;
3. To define one/more joint activities to be performed in the coming year(s);
4. To organise (a) joint dissemination event(s) to communicate our views/results to a wider public (side event international conference, etc.).

Setting the Scene

Circular Economy

A Circular Economy is an industrial system that is restorative or regenerative by design. It replaces the 'end-of-life' concept with restoration, shifts towards the use of renewable energy, eliminates use of toxic chemicals, which impair reuse, and aims for the elimination of waste through the superior design of materials, products, systems, and, within this, business models.

Reference: Ellen MacArthur Foundation (2012)

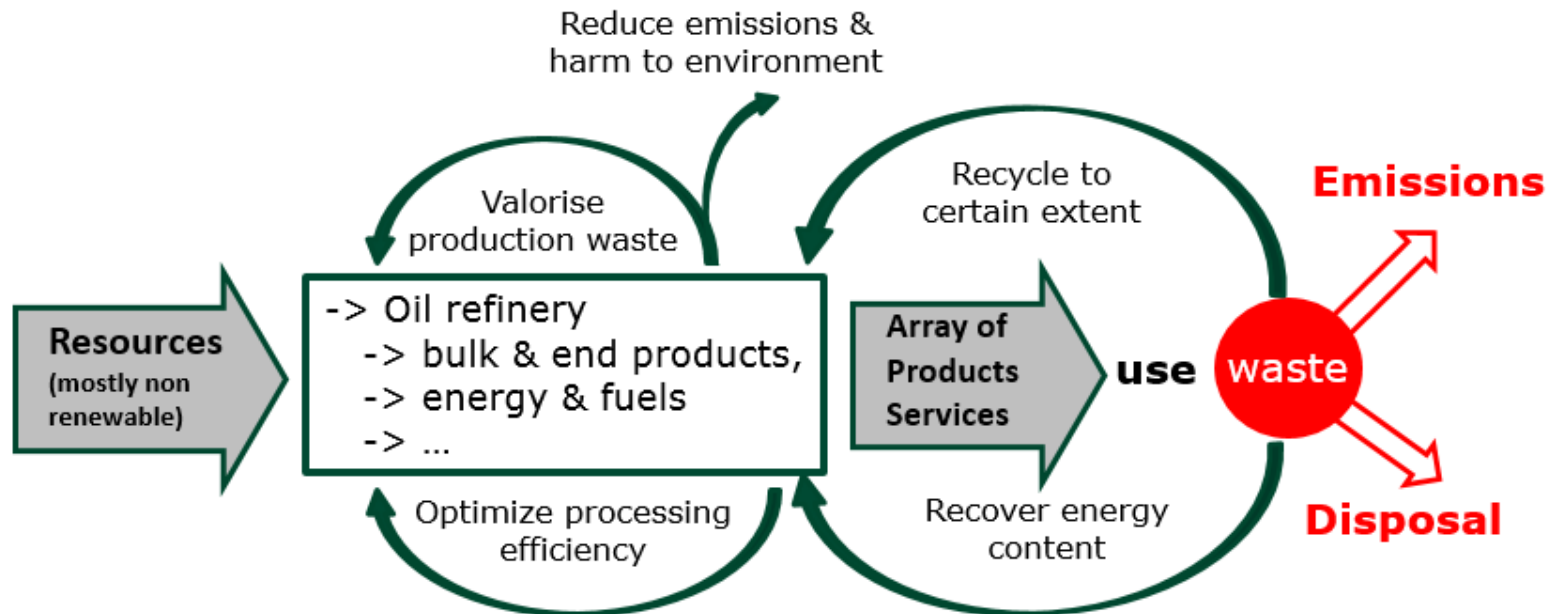
Setting the Scene

Conventional Economy

Resources
depletion !

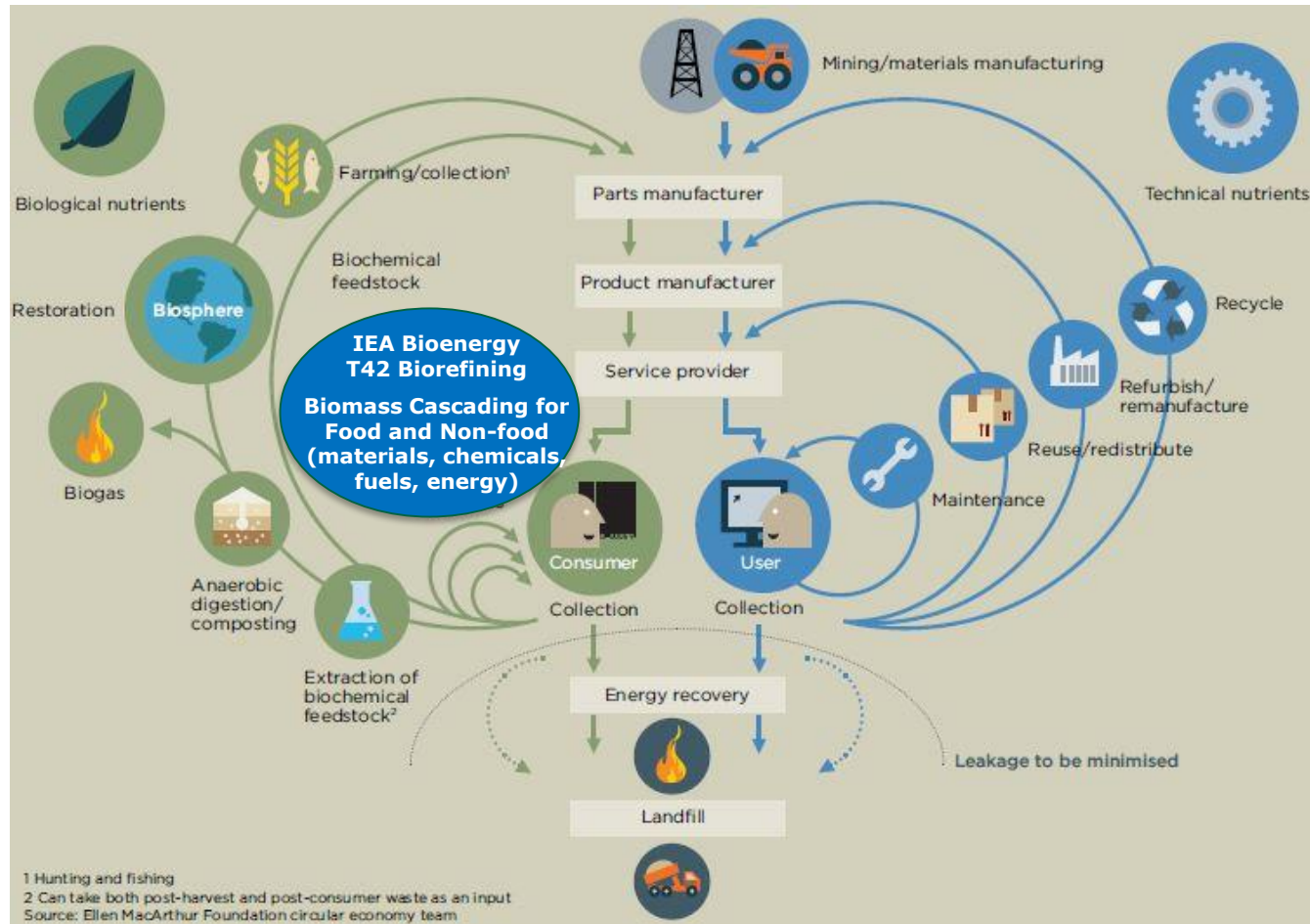
Production system is not sustainable

Global
Warming !



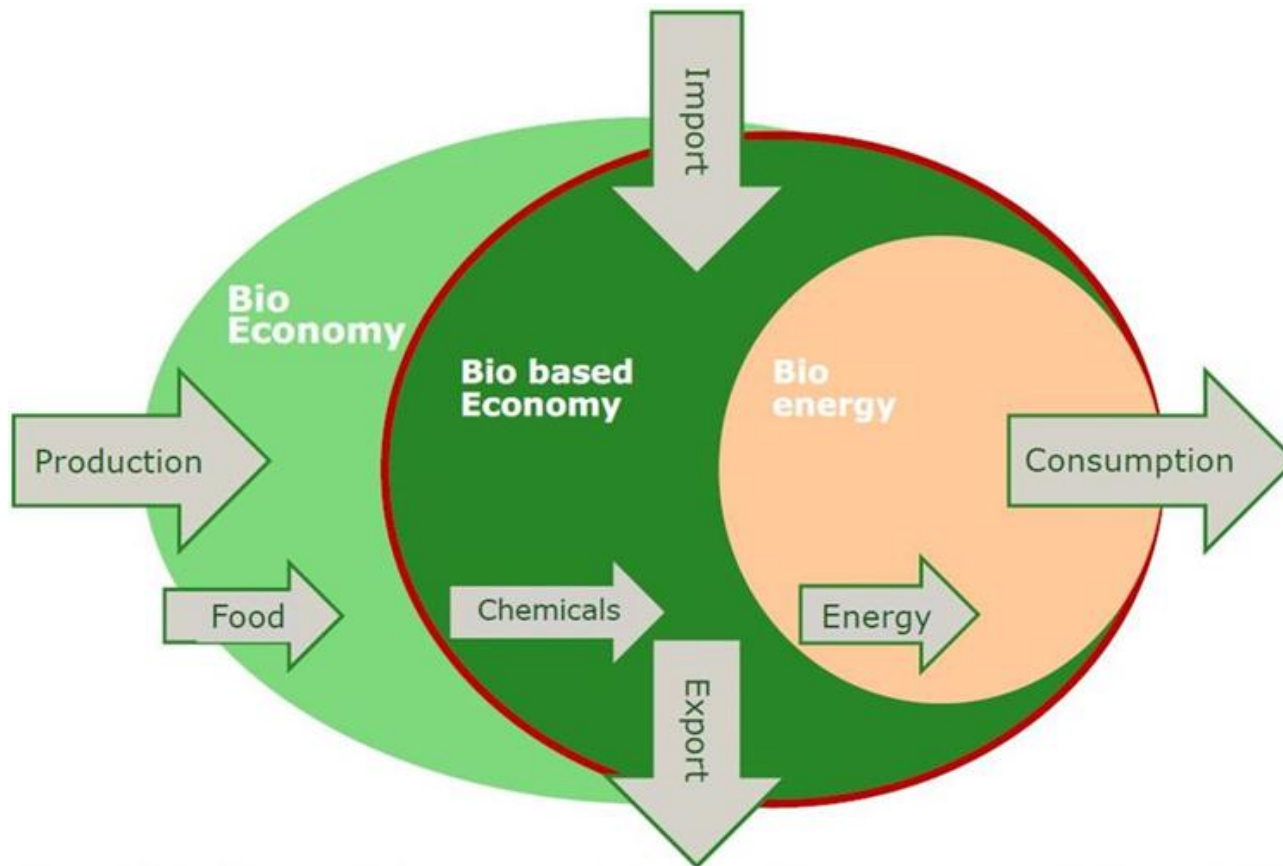
Setting the Scene

Circular Economy



Setting the Scene

BioEconomy and Biobased Economy



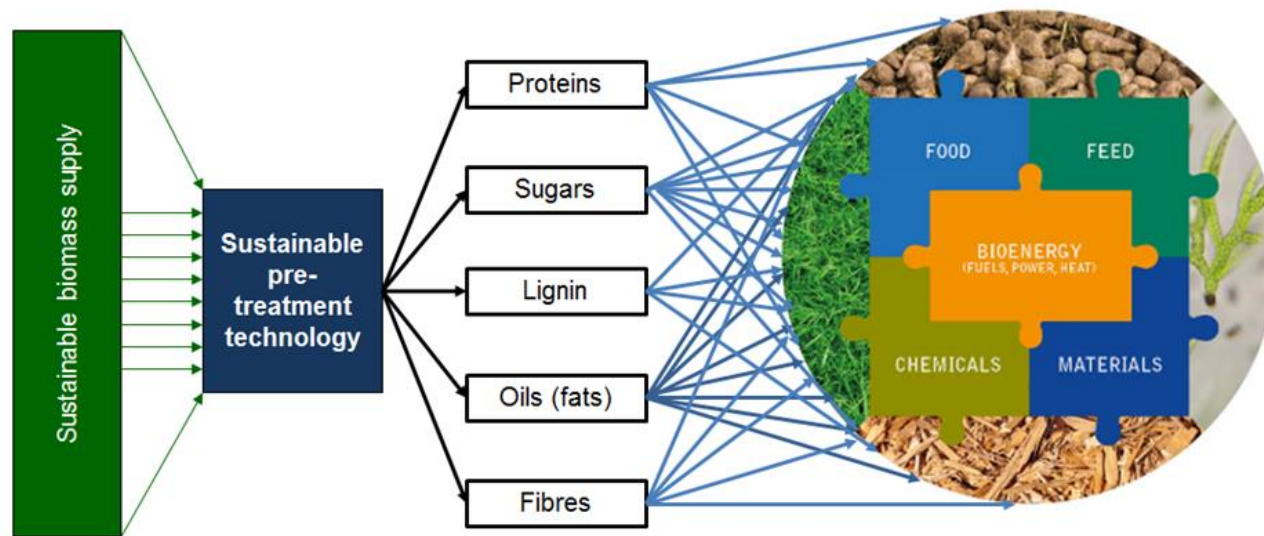
Source: RVO (Kwant)

Setting the Scene

Biorefining

Definition IEA Bioenergy Task42

Sustainable processing of biomass into a portfolio of marketable biobased products (food and feed ingredients, chemicals, materials, fuels, energy, minerals, CO₂) and bioenergy (fuels, power, heat)



Setting the Scene

Bioenergy

Bioenergy: fuels, power, heat/cold

- In the short-term bioenergy will be a driver for the realisation of a Bio(based) Economy by global sustainable mobilisation of the required biomass resources, and the development of required standardisation/certification systems
- In the midterm bioenergy will provide advanced biofuels for the aviation, shipping and heavy duty road transport; potentially in combination with RES-hybrids for energy storage
- In the longer-term bioenergy will remain the lubricating oil being used in several sectors future Circular Economy

Setting the Scene

Bioenergy in Future Circular (Bio)Economy

Product-based biorefineries

- Chemical-based biorefineries
- Material-based biorefineries

Main focus on production chemicals or materials from biomass; agro and process residues used for feed or energy to optimise full biomass-to-products chain sustainability

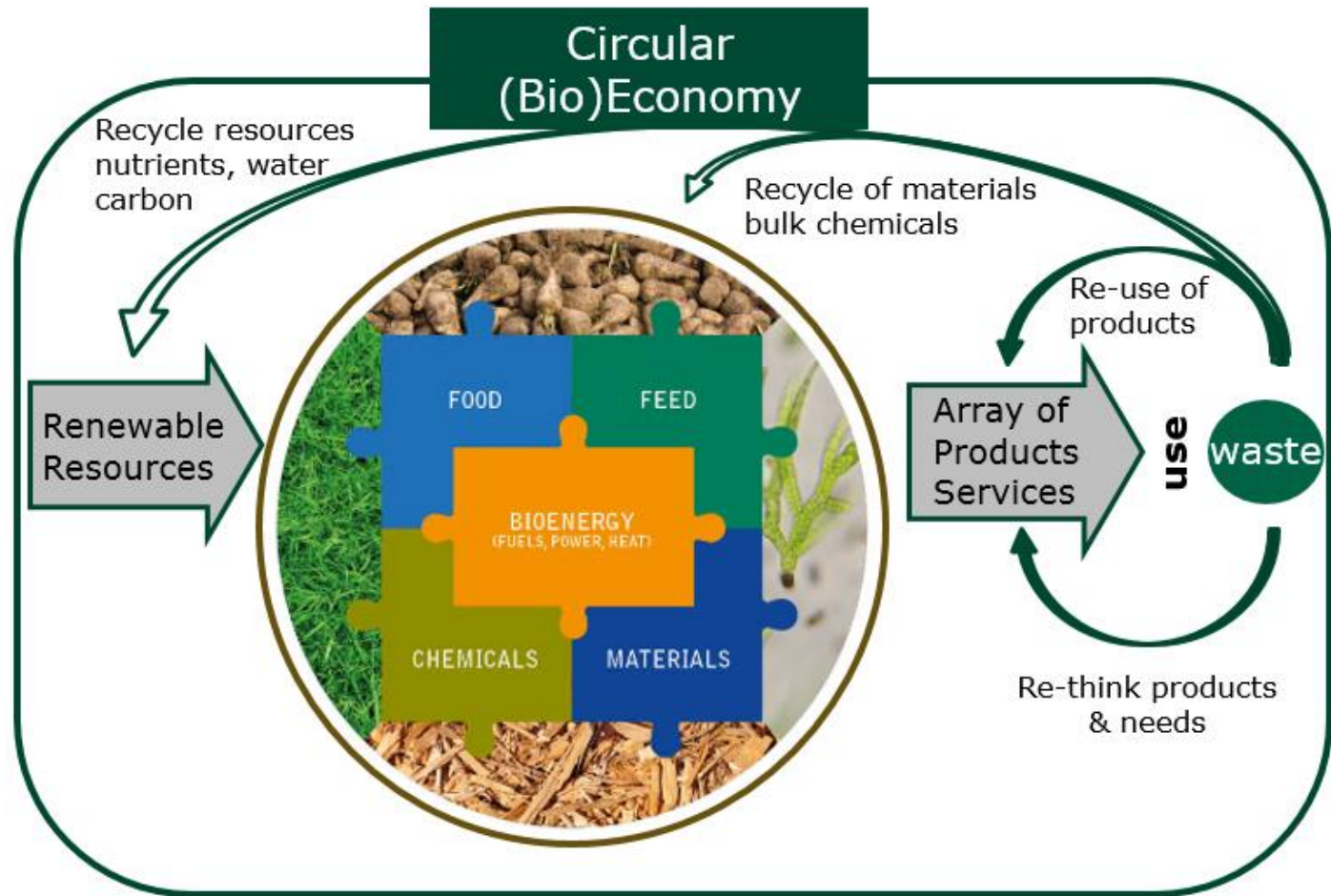
Energy-based biorefineries

- Biofuel-based biorefineries
- Biopower-based biorefineries
- Bioheat/cold-based biorefineries
- Biogas-based biorefineries

Main focus on production secondary energy carriers from biomass; agro and process residues used for production added-value feed or biobased products to optimise full chain sustainability, incl. overall economic performance, reducing necessary financial governmental support

Setting the Scene

Bioenergy in Future Circular (Bio)Economy



Sequence partner presentations

IEA Bioenergy



IEA Bioenergy

Task42 - Biorefining in a Future BioEconomy

IEA Bioenergy

Task42 - Biorefining in a Future BioEconomy



Partner presentations

Issues to be included in your intros:

- Current running and planned bioenergy/biorefining activities within the framework of a circular (bio)economy in which your organisation is involved.
- Overview of recent reports published by your organisation dealing with this subject.
- What role do you see for bioenergy and biorefining in a future circular (bio)economy, i.e. bioenergy/biofuel based biorefineries vs. product-based biorefineries?
- What are in your view the most important technical barriers to overcome and major R&I Actions (TRL increase) necessary to favour market deployment of bioenergy processes/biorefineries in a circular (bio)economy?
- What are the most important non-technical bottle-necks?

LUNCH
12:30-13:30

Analysis and identification cooperation opportunities

13:30-15:00

13:30 – 14:00

1. Individual/organisation specification (flapover) identified:
 - Overlapping activities
 - White spots (knowledge/expertise, activities)
 - Cooperation opportunities (subjects, financing)

14:00-15:00

2. Plenary presentation flapovers and roundtable discussion
(IEA Bioenergy, IRENA, FAO, EC DG JRC, ETIP, EERA, T42)

Tea / Coffee

15:00-15:15

SMART appointments and follow-up

15:15-16:00

- Joint activities next 12-18 months?
- Joint knowledge dissemination opportunities?
- Who will take the lead?
- Time planning?
- Financing?
-

16:00 End of Meeting