



Inter-Task Lessons Learned Biofuels

Assessment of lessons learned and successes for biofuels commercialization and deployment

Tomas Ekbom, T39/SVEBIO, and Franziska Müller-Langer, T39/DBFZ

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Status: Delayed start but well underway and good support from participants

- Objective to evaluate reasons underlying the past and ongoing boom and bust cycles of biofuel technologies development, demonstration, deployment and replication.
- Identify technology successes and best policy framework conditions and measures for stimulating increased future markets for production and consumption of biofuels.
- Well-attended kickoff 23 Sept, 2020: The team identified markers to serve as guides to compare projects and plants. SVEBIO and Bioenergy 2020 have useful databases.
- The project aims to answer two research questions: “*What is required to re-stimulate vigorous biofuels development and scale up?*” and “*What are key factors for the success of sustainable advanced biofuel projects?*”

Project organization – the life tree

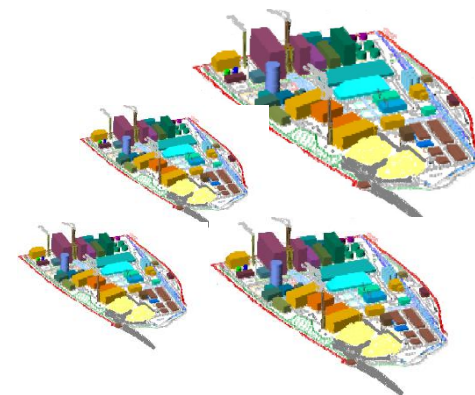
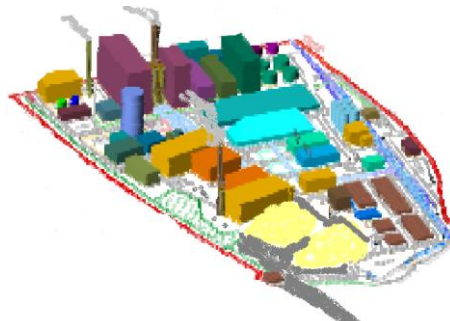


Lessons learned or success story?



Whatever definition, certainly experiences were made!

Demo to full-scale involves several steps and may take 3-6 years



Demonstration Plant

1-2 year construction

2-6 years op. program

€50-100 M

2020

Industrial Prototype

2-3 year construction

€100-400 M

Self-supporting based on
sales, grant, support

2024

2028

Deployment

3 year constr.

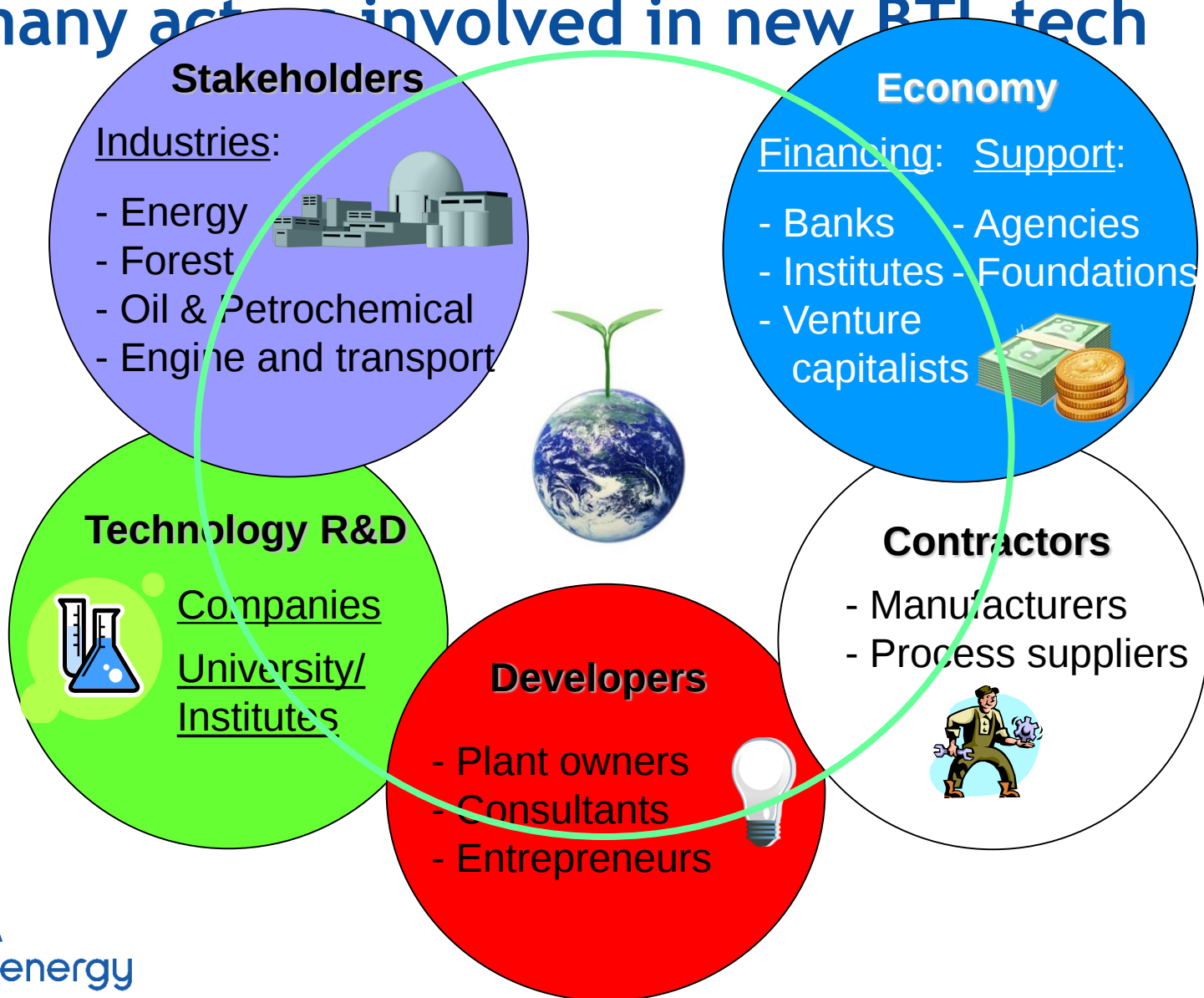
€200-500 M

"Commercial"

2032



Complex commercializing process with many actors involved in new BTL tech



Project overview in a nutshell

Activities and expected results | WPs

„Lessons learned biofuels I“ (Triennium 2019-2021)

WP 1 | Status quo biofuel projects

T39 (Lead), T45

Overview TRL, capacities of biofuels projects, Wrap up national programs
Existing sustainability / certification schemes

WP 2 | Meta-analysis existing studies

T45 (Lead), T39, T40

Inventory of studies, specifically addressing lessons learned biofuels
Screening with criteria to be defined

WP 3 | Case studies technologies

T39 (Lead)

Success stories for dedicated technologies and regions, (e.g. US, EU, Brazil)

WP 4 | Case studies supply chains

T40 (Lead), T45

Success stories for biomass supply chains

WP 5 | Synopsis / synthesis of key issues

T39 (Lead), T40, T45

Conclusions, guideline „good to know“ for decision makers, identification of required actions for „Lessons learned biofuels II“

WP 6 | Project management and dissemination

T39 (Lead)

„Lessons learned biofuels II“ (Triennium 2022-2024)

As intertask project incl. several Bioenergy TCP Tasks, (IEA AMF?)



Projected schedule | 07/2020 to 10/2021

Work Package (WP) / Project month	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	Aug	Sept	Oct	Nov
WP1 Status quo biofuel projects														
WP2 Meta-analysis on existing studies														
WP3 Country studies, expert interviews														
WP4 Case study supply chains														
WP5 Synopsis / synthesis of key issues														
WP6 Project mgement, reporting														
Project Meetings (date)	23			8		3	31			2		21		
Milestone	M1			M2				M3						M4
Report by 31 Oct 2021	Start											Draft		Final

Workshop at the Advanced Biofuels Conference on 21 Sept 2021. Aim: get consensus of conclusions and findings and to show stakeholders interested in commercializing the technologies which are good examples. Outcome: final findings for policy makers and companies (developers and investors).

Several present activities in parallel

1. **Status quo biofuel projects:** Overview of conv biofuel capacities, including brief summary of the dev and status of advanced fuel projects worldwide. Issues related to governance of biofuel dev, e.g., mapping and inventory of existing policy instruments.
2. **Meta-analysis on existing studies:** comprehensive summary of main findings and lessons learned re successes and failures for biofuel projects in analysed studies, according to criteria.
3. **Case studies technologies:** Austria, Brazil, Germany, Sweden and the USA. Each studied for two cases, i.e., biofuel projects or plants. Analysis of each country policy in terms of successes or lessons in terms of the projects and plants.
4. **Case studies supply chains:** Success stories and insights about future potential dev's with assessment thereof. Biomass fractionation methods and lessons and successes in sust. standards and certification of international supply chains.

Important dates and Deliverables

Meetings and time schedule

- Kickoff 23 Sept 2020
- Meeting 2 8 Dec 2020
- Meeting 3 3 Feb 2021
- Meeting 4 31 March 2021
- Meeting 5 2 June 2021
- Meeting 6 21 Sept 2021
- Workshop ABC 21 Sept 2021
- Project closure Nov 2021

Deliverables and reports

- ExCo progress reports:
 - Report 1 on 22 Oct 2020
 - Report 2 in Spring 2021
 - Report 3 in Autumn 2021
- Deliverables / reports:
 - WP 1 by Oct 2020
 - WP 2 by March 2021
 - WP 3 and 4 by May 2021
 - WP 5 by Aug 2021
- Final report by 31 Oct 2021

We will not take any shortcuts or cover up the bad apples - or green spray the lawn



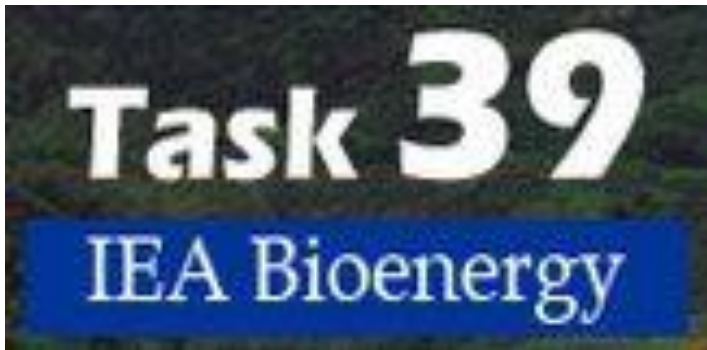
We will aim for the Moon!



You are here now

Please add your expertise and
comments and help to the
project, thank you!

Tomas Ekbom &
Franziska Müller-Langer



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