

BIOSMART WP 10

**Assessment of institutional settings and evidence based policy
recommendations**

Trondheim WS 6-7 March 2017

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Structure

- **Aim, method and updated timetable with project extension**
- **Review of the current policy framework and actors and institutional settings in selected bioeconomy sectors**
- **Next steps**
- **Issues for discussion**



WP10: Main aims

Better understanding of the impacts of current policies and institutional settings on bioeconomic transition.

Systematic review of institutional settings of policy frameworks of selected bioeconomic sectors.

Identify opportunities for greater coordination and integration of policies.

Learning from other countries (e.g. policy transfer).

Identify areas where policy may currently be siloed (and how to escape it)

→ as opposed to cross-sectoral

Test the practical feasibility and acceptability of new institutional settings in collaboration with the integrated foresight analysis.

Based on the results of the foresight analysis recommend how policies may assist the transition to a smart bioeconomy.



WP10: Methods

Reflect the theoretical concept of transition (provided by WP3) in the context of the policy analysis.

Develop a framework for policy analysis and identify relevant and important stakeholders.

Map the institutional setting of selected sectors.

Review **policy documents and grey literature.**

Conduct interviews with most important and relevant stakeholders: politicians, bureaucrats, representatives, experts.

Stakeholder workshops, with WPs 2,3 and 5.



WP10: Updated timetable

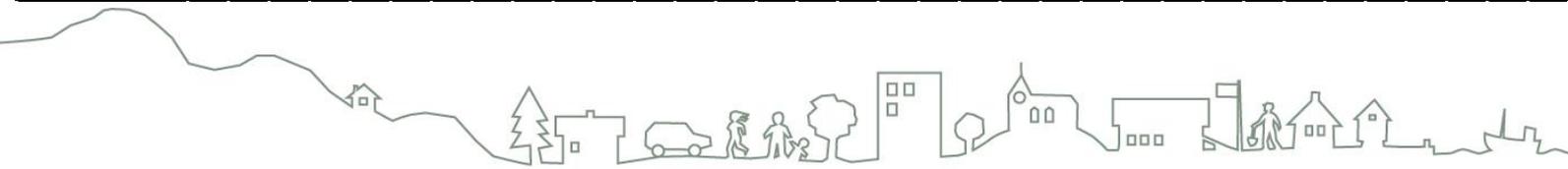
- Task 10.2: Review of the current policy framework and actors and institutional settings in selected bioeconomy sectors
 - **Finished by 30th April 2017**
- Task 10.3: Assessment of policy lesson learnt from bioeconomic transitions in Germany and New Zealand
 - **Milestone: Summary on factors of success for integrated governance strategies and implementation - 31th January 2018**
- Task 10.4: Assessment of applicability of policy lessons learnt in a Norwegian context
 - **Milestone: Guidelines of required institutional settings - 31st July 2018**
- Task 10.5: Assessment of acceptability of new institutional settings and policy measures
 - **Milestone: Concept for assessment of stakeholder acceptability - 31st January 2019**
- Task 10.6: Recommendations for policy changes fostering transitions
 - **Milestone: Policy recommendations to transition - 30th June 2019**



WP10: Updated timetable

- Task 10.7: Book Chapter - 31st May 2019
- Task 10.8: Conference contributions: AAG 2017, RGS-IBG 2018, ESRS congress 2019
- Task 10.9: Policy briefs
 - Policy brief 1: Policy barriers 30th April 2017
 - Policy brief 2: Policy NZ & Germany 31st January 2018
 - Policy brief 3: Policy recommendations 30th June 2019

	2016												2017												2018												2019					
Tasks	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
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Task 10.2: Review of the current policy framework and institutional settings

15 years from now, in your opinion: which partners will be important for your business?

Mean and Std. Deviation. (1 = not important, 3= neutral middle, 5 = very important)

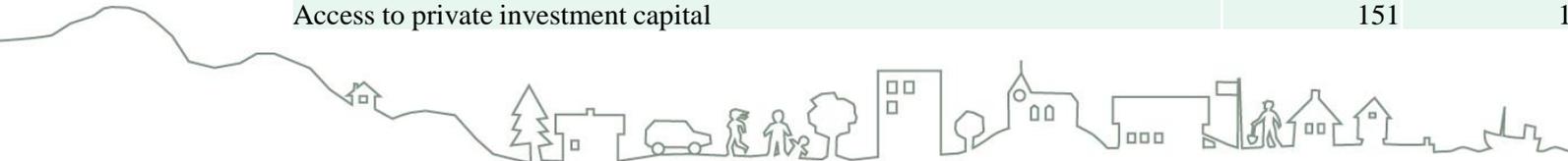
	Mean	std.deviation
Agriculture	3,86	1,419
R&D	3,55	1,444
Industry/processing	3,53	1,531
Forestry	3,44	1,541
Public institutions	3,42	1,441
Transport sector	3,38	1,482
Biotech sector	3,19	1,639
Investors	2,87	1,632
Aquaculture	2,28	1,696
Fisheries	2,26	1,665



Task 10.2: Review of the current policy framework and institutional settings

15 years from now, in your opinion: which factors would have contributed to an increased share of bioeconomic activity?

	Frequency	Percent "yes"
Knowledge, insight and training	782	59,6
Public grants and tax breaks	697	53,1
Public awareness - environmental issues	669	51,0
Increased cooperation between research and the business sector	603	45,9
A political bioeconomy strategy	593	45,2
Increased demand for bioenergy	528	40,2
Increased demand for biomass	527	40,1
Increased acceptance for biotech solutions	459	35,0
Climate change	453	34,5
Increased demand for biotech solutions	449	34,2
Public demand for recycling	438	33,4
Other political/public regulations	422	32,1
Increased taxes on fossil energy	420	32,0
Fossil energy scarcity	344	26,2
Increased cooperation between sectors	326	24,8
Int'l negotiations and treaties	311	23,7
Access to private investment capital	151	11,5



The Bioeconomy Strategy

- Wide definition of the bioeconomy concept
- A **generic** document
- **Cross-sectoral** approach
- **New markets** for biobased products and productions
- Utilization of bioresources:
 - The requirement for food ranked first
 - Efficiency in utilization of bioresources
 - Profitability in utilization of bioresources
- Sustainable intensification and growth



Preliminary conclusions

- **Access to private investment capital and fossil energy scarcity are minor drivers of bioeconomic transitions.**
- **State initiatives and governmental policies emerge as key drivers with the highest priority across different stakeholder types.**
- **Valuable comparison between key sectors:**
 - **Agriculture: not actively engaged in bioeconomic discussions, different voices and strategies, highly subsidised**
 - **Forestry: Very active in bioeconomic excurses, common vision and joint strategy, more regulated than subsidised, open to competitive markets**



Preliminary conclusions (continued)

➤ **Forestry and aquaculture self-image: important bioeconomic sectors. Respondents on the survey say these are less important partners in the future**

➤ **Contradictions**

1. Gov strategy kept generic to avoid barriers and dictate development. (Private) stakeholders say lack of public initiatives can be seen as a barrier...

2. While policy measures are seen as key drivers, dominating governing principles enhance siloing effects – although often unintended.

More public initiative – as the respondents want – means more sector-based activities while the Gov's bioeconomy strategy calls for more cross-sectoral activity...

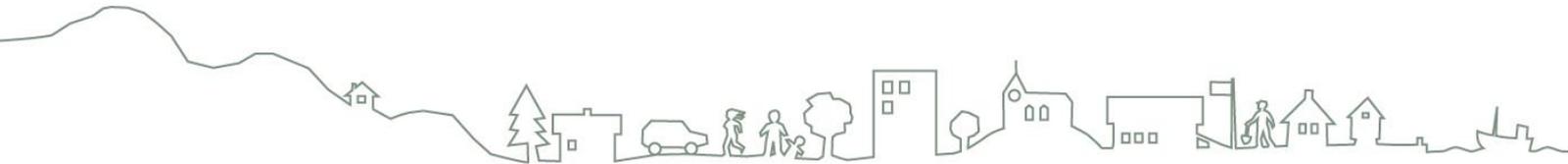


Next steps in 2017

- Finalising review of institutional settings in sectoral policies focussing on agriculture and identification of barriers for transition
- AAG presentation (Annual Meeting in Boston 5-9 April)
- Publication of policy brief on policy barriers to bioeconomic transitions
- Preparation of case studies in Germany and New Zealand



Thank you!



Issues for discussion

- Does the revised timetable fit with the timetables in other WPs
- Integration and coordination of stakeholder interactions and other exchanges between WPs
- Specific meeting(s) between WP2, WP3 and WP10 to discuss cooperation on stakeholder assessments and case studies in autumn / winter?



Task 10.2: Review of the current policy framework and institutional settings

Sectoral analytical approach: agriculture

Categories for analysing institutional settings (based on Davies et al. 2014):

	Political goals	Stakeholders	Infrastructure	Technology	Culture	Processes and procedures
Agriculture	<ul style="list-style-type: none"> - sustainable intensification - national food security - utilization of bio-resources and biomass - residuals as raw materials (LCA) - innovation (e.g. Foods of Norway) 	<ul style="list-style-type: none"> - Ministry of Ag. and Food - ag. gov. agencies - National Farmers Union - Smallholders Union - ag. Co-ops - food industry representatives (- retailers and consumers?) 	<ul style="list-style-type: none"> - investment-structure (e.g. Innovation Norway) - value chain - road-rail-ship - Infrastructure for R&D 	<p>Examples:</p> <ul style="list-style-type: none"> - bioenergy, utilization of residuals - small-scale biogas production - agronomy improvements also targeted at resource efficiency and delivery of multiple ecosystem services - GMOs 	<ul style="list-style-type: none"> - innovative or conservative? - attitude towards risk - collective or individual - attitude towards government and policy 	<ul style="list-style-type: none"> - formalized or ad-hoc? - environmental legislation - corporative elements

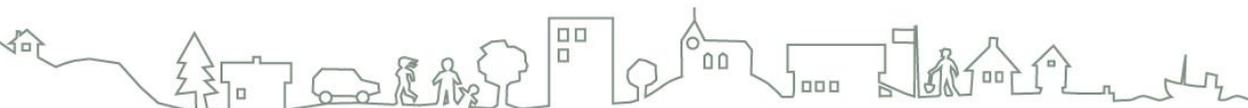


Task 10.2: Review of the current policy framework and institutional settings

Sectoral analytical approach: forestry

Categories for analysing institutional settings (based on Davies et al. 2014):

	Political goals	Stakeholders	Infrastructure	Technology	Culture	Processes and procedures
Forestry	<p>Meld.St. 6 (2016-2017): Increased activity, value creation and employment.</p> <p>Pillars: competitiveness, sustainability, climate mitigation, strengthened value chains, R&D.</p> <p>An important sector in the new bioeconomy</p>	<ul style="list-style-type: none"> - Ministry of Ag. and Food - gov. agencies - private forest organizations - forest coop - NGOs: transportation, construction, industry - environmental orgs (eg. WWF) 	<ul style="list-style-type: none"> - investment-structure (e.g. Innovation Norway) - road-rail-ship - infrastructure for R&D 	<p>Volume</p> <ul style="list-style-type: none"> - construction, buildings - bioenergy <p>Value</p> <ul style="list-style-type: none"> - biotech and nanotech - pharmaceuticals - cosmetics? 	<ul style="list-style-type: none"> - innovative or conservative? - attitude towards risk - collective or individual - attitude towards government and policy 	<ul style="list-style-type: none"> - formalized or ad-hoc? - environmental legislation - corporative elements



Task 10.2: Review of the current policy framework and institutional settings

Survey results relevant for Task 10.2

**Which sectors/businesses are important partner(s) for your business/company:
Public institutions.**

Examples: product development, sharing knowledge or hardware, utilization of raw materials, R&D etc.)

	Frequency	Percent
Agriculture	820	62,5
Forestry	563	42,9
Fisheries	80	6,1
Aqua culture/fish farming	68	5,2
Industry and processing	439	33,4
Biotech businesses	85	6,5
Transport-sector	390	29,7
Investors	58	4,4
R&D	290	22,1
Public institutions	304	23,2



Task 10.2: Review of the current policy framework and institutional settings

Thematic focus:

- On the agricultural and forestry sectors and policies and how these have affected transitions in the different bio-economic sectors
- Cross-sectoral emphasis

Definitions

Policy framework

- Set of guidelines, as well as long term goals, which are taken in to account when policies are being made. This gives direction to developments.
- Local structure established to organize policy documentation into groupings and categories.

