

# The Bioeconomy Strategy for the Inland Region 2017-2024

## A business strategy and action plan



The Inland Region – a leading powerhouse for a sustainable bioeconomy in Norway

Photos on the front page:

Cow: Heidner Biocluster, Mjøstårnet: Ringsaker municipality, Artic charr: Akvakultur in Vesterålen and Sigerfjord Fisk AS, test tube: Spermvital





Foto: Oppland fylkeskommune

## Mission

The strategy will help the Inland Region work towards achieving a national position as a bioeconomy region. The strategy is intended to contribute to greater competitiveness and value creation in the Inland Region, and to the green shift in the national economy. This development will take place in a manner that ensures future access to resources and the development of a sustainable business sector. Through this work the venture will forge links with relevant and complementary technical and development environments in other regions, in and outside Norway. The work will help to position the Inland Region for a potential regional research boost and increased participation in international research programmes such as the EU's Horizon 2020.

Resolution from the joint county council meeting of Oppland and Hedmark county authorities (April 2015).



Foto: Heidner



Foto: Oppland fylkeskommune

## Foreword

The Bioeconomy Strategy for the Inland Region 2017-2024 is a collaboration between Hedmark County Authority, Oppland County Authority, the County Governor of Hedmark and the County Governor of Oppland.

The strategy was approved in a joint county council meeting for Hedmark and Oppland in April 2017.

Many stakeholders in the bioeconomy in the Inland Region have participated in the process through meetings, workshops, visits to companies and consultations. What is being planned is a partnership with business, municipalities, R&D environments and other authorities and stakeholders in connection with the implementation of the action plan. We would like to thank everyone who has taken part in the work.

Hedmark County Authority

Oppland County Authority

The County Governor of Hedmark

The County Governor of Oppland





Foto: Spermvital

# Contents

A bioeconomy for the nation, a strategy for the Inland Region	5
Why the bioeconomy?	5
Why a regional bioeconomy strategy?	6
A political priority	6
Vision, goals and strategies	7
Goals and strategies	7
Organisation of the bioeconomy work in the Inland Region	8
Revision	9
Annex A Action Plan	11
Annex B: Activities	19
Annex C The steering group for the bioeconomy strategy for the Inland Region	21

## A bioeconomy for the nation, a strategy for the Inland Region

The Inland Region is home to a significant proportion of Norway's land-based biological resources, strong professional and expert environments and complete value chains for the management and development of a number of bio-based products. The Inland Region has actors within food production, agriculture and forestry, genetics, breeding and reproductive technology, bioenergy, residual materials and waste management, inland fish farming, freshwater management, the food industry and renewable energy. The Inland Region is ready to play a key role in developing the bioeconomy further in a green, carbon neutral future.

The strategy provides direction for the development of the bioeconomy in Hedmark and Oppland and aims to lay the groundwork for increasing the value creation, number of jobs and competitiveness in bio-based value chains.

### Why the bioeconomy?

"Sustainable Development" was launched by the World Commission on Environment and Development as early as 1987 as a strategy for resolving poverty and environmental problems in context. The starting point was, and is, that we must address the needs of the world's population today without destroying the ability of future generations to meet their needs. The level of ambition is high. By achieving its sustainability goals, the global community wants to eradicate poverty, fight inequality and stop climate change. Environmental, economic and social sustainability must be worked on in parallel. ([www.fn.no](http://www.fn.no)) The

Paris Agreement was signed in December 2015. It sets clear goals for greenhouse gas emissions and for the climate. The Paris Agreement's goals include preventing the temperature of the globe rising by more than 2°C (preferably by no more than 1.5°C) and for the globe to achieve climate neutrality sometime between 2050 and 2100. In other words, the desire and need for a "green shift" is great.

Population growth and global climate and environmental challenges will require a considerable willingness to change and restructure in the future. The need for food, energy and materials will grow, but further growth and development will have to take place within the limits of what the natural environment can tolerate. This will require a transition to products and services that have a significantly less negative impact on the climate and environment and the more efficient utilisation of resources than today. Society needs to undergo a green shift. The bioeconomy, based on the efficient production, utilisation and processing of renewable biological resources, is part of the solution, both globally and nationally.

"The bioeconomy refers to the sustainable production and conversion of biomass into a range of food, health, fibre and industrial products and energy. Renewable biomass encompasses any biological material as a product in itself or to be used as raw material."  
(EU definition)





Foto: Oppland fylkeskommune

The OECD believes the bioeconomy will be a vital element of Europe's economy within 40 years. Norway and the Inland Region, with their substantial resources and expertise base, have a great opportunity to contribute to, and lead the way in, the green shift.

## Why a regional bioeconomy strategy?

The Inland Region is already a significant stakeholder in the bioeconomy. Businesses in the Inland Region have developed a strong position, both nationally and, to some extent, internationally. This is true within food technology and the food industry, genetics, breeding and reproductive biotechnology, agriculture, forestry, inland fish farming, the wood mechanical industry, bioenergy, and the recovery, recycling and renovation technology and industry. The Inland Region has a tradition of producing and creating value from raw materials. The structure of the business sector includes everything from individual companies to networks, clusters and innovation systems.

The Inland Region also has the potential for much more. It has the potential for increased growth in established and emerging bioeconomic industries and the better utilisation of biological resources and areas that can be used for sustainable production. With this potential and strengths, the Inland Region has what it takes to become a leading powerhouse for a sustainable bioeconomy in Norway.

This is the backdrop for the Inland Region's bioeconomy strategy and the basis for its vision. The annexes describes the region's advantages in more detail.

## A political priority

The Inland Region manages a significant proportion of the country's biological resources and the region's industrial structure is full of associated industries. The strategy for developing a sustainable bioeconomy is, with its plan and measures, a contribution to the development of the region and the nation.

The county authorities' social mission is to encourage and provide direction for the region's social development. The county authorities' are prioritising the bioeconomy as a key business policy for the Inland Region's contribution to the nation's development. It is intended to be understood as the first step in a development process that we hope will characterise and reshape social development for a long time to come. Such a development process will require good cooperation, coordination and interaction with the Inland Region community and the rest of the nation. Cooperation is the key to an integrated bioeconomy.



Foto: Heidner



Foto: Silje Ludvigsen, Mjøsen skog

# Vision, goals and strategies

The bioeconomy must be developed further in order to meet the major social challenges we face: the climate and access to resources, energy and food. The bioeconomy is a tool for sustainable social development aimed at securing future prosperity. The Inland Region has unique opportunities with the largest land-based bioresources in Norway.

## Goals and strategies

### Vision

The Inland Region – a leading powerhouse for a sustainable bioeconomy in Norway.

The vision has been followed up with five goals that are intended to ensure that the Inland Region becomes a leading stakeholder in the bioeconomy and makes a significant contribution to sustainable growth and development, regionally, nationally and internationally. Each of the five goals has been followed up with strategies that require cooperation between public stakeholders and between public and private stakeholders.

The goals and associated strategies (S) are:

### 1. Knowledge and expertise

The Inland Region must have access to the knowledge and expertise it needs to develop the regional bioeconomy.

#### S1

Develop and reinforce strong expert bioeconomy environments in all parts of the Inland Region.

#### S2

Initiate and enhance research, development and innovation projects/programmes (multidisciplinary/intersectoral/international)

#### S3

Secure relevant and attractive expertise

### 2. Market and competitiveness

The Inland Region must have attractive entrepreneurial and development environments for bio-based value creation.

#### S4

Facilitate the effective establishment of bio-based industry and commerce

#### S5

Work to attract investors and entrepreneurs

#### S6

Work to increase market opportunities for bio-based products

### 3. Biological resources and return streams

The Inland Region must be a leader in the development of the sustainable and knowledge-based production and use of bioresources

#### S7

Contribute to increased sustainable production in agriculture, forestry and inland fish of high-quality and, wherever possible, based on inland resources

#### S8

Work towards the sustainable and knowledge-based management of the region's bioresources





Foto: Oppland fylkeskommune

#### S9

Develop the region further within residual resources and the exploitation of return streams (circular economy)

#### 4. Cooperation

The Inland Region's focus on the bioeconomy must provide the basis for a joint, result-oriented effort that is attractive to all relevant stakeholders and binding for all those involved.

#### S10

Encourage more cluster projects and strengthen the interaction between stakeholders within innovation (triple helix, R&D institutions, business and funding agencies)

#### S11

Cooperation, simplification and coordination of the funding agencies for result-oriented funding allocation

#### 5. Visibility and communication

The Inland Region must influence and be a driving force in the bioeconomy and provide information to business and society.

#### S12

Develop arenas for information, dialogue and cooperation further, including from an international perspective

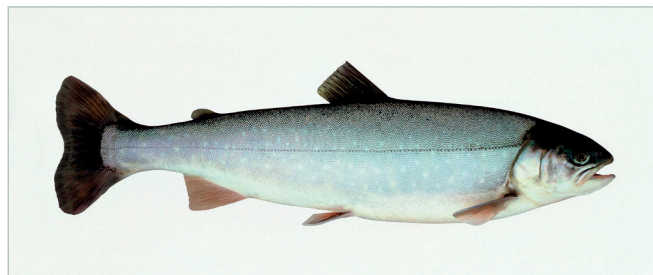


Foto: Eiliv Leren

#### S13

Raise the level of awareness in society and business of the need to shift to a circular economy based on biological resources and expertise.

The associated action plan has been appended.

## Organisation of the bioeconomy work in the Inland Region

The bioeconomy strategy was developed in a collaboration between the county authorities and county governors of Hedmark and Oppland, and the strategy document is owned by all four stakeholders. The bioeconomy strategy requires coordination between public stakeholders, as well as between public, business and knowledge and expert institutions (triple helix).

The bioeconomy is very dynamic. New opportunities will arise that will need to be assessed during the process. New opportunities, new knowledge, new connections and new policies may come from expert environments, from business or as new political declarations. This dynamism must be reflected in the organisation.

Overarching responsibility for implementing the strategy will lie with the steering group, which consists of the four strategy owners. Innovation Norway will be an observer. The steering group must ensure there is a good dialogue and a good overall use of funds between the funding agencies.

#### The steering group will do this by:

- Ensuring there is a continuous dialogue and cooperation between business and the expert environments in the Inland Region.



Foto: Karina Hauge Johansen/Klosser Innovasjon

- Highlighting and ensuring public dialogue and attention in relation to the development of the bioeconomy.
- Anchoring in the municipalities
- Following up the action plan and reporting to the county councils
- Designing a communications plan for implementation of the strategy
- Providing recommendations concerning policy formulation

The day-to-day follow-up and internal coordination associated with a bioeconomy strategy will be the responsibility of the strategy owners. The work will have its own project management, which will have close ties to the four strategy owners.

A Council for Bioeconomic Growth in the Inland Region (BioCouncil) will be established. This council will consist of six to eight national leaders with a high degree of expertise within different parts of the bioeconomy. They will represent research and expert environments as well as business. The council will constitute itself. The council will be a listening post, provide expertise and contribute to result-oriented strategy development. The council will provide input to the steering group and the project management will assist the council with administration.

**The council will focus on the following areas:**

- Providing recommendations and advice on measures and implementation
- Helping to ensure the advocacy work by the public sector, business and funding agencies in relation to national and international stakeholders is coordinated
- Being an active listening post for developments within the bioeconomy, nationally and internationally

- Being an arena for contributions to the further development of the strategy
- Having regular meeting points with the steering group

## Revision

The county governors and county authorities are the strategy owners and responsible for following up the action plan. The strategy's time horizon is from 2017 to 2024.

Concrete measures and actions that will be implemented within the objectives of the strategy have been formulated into an action plan. The priorities set forth in the action plan apply to the current planning period and will be replaced with new priority measures in the next planning period. The action plan will be revised in cooperation with municipalities, business, expert institutions and other stakeholder groups, and will be the operating document for follow-up and implementation.



Foto: Spermvital



# Annex







# Annex A

## Action Plan

The action plan was formulated on the basis of the input provided during the strategy process.

### 1. Knowledge and expertise

**Goal:** The Inland Region must have access to the knowledge and expertise it needs to develop the regional bioeconomy.

#### Strategy S1:

**Develop and reinforce strong expert bioeconomy environments in all parts of the Inland Region.**

Measures area	Measures	Responsibility and partners
Ensuring sufficient government grants to boost knowledge and expertise for the bioeconomy in the Inland Region	Advocacy work, concrete initiatives for central authorities (ministries and parliament)	<b>FK</b> FM Knowledge institutions Business organisations
Contributing to the development of a national bioeconomy centre in the Inland Region	Establish networks between regional and national knowledge environments based on Heidner	FK, FM, IN NTNU, HINN, NIBIO, clusters, networks, technical colleges, business, Energigården, et al.
Strengthening the expert environment for the development and use of biotechnology in the processing of biomass and reproduction	Develop BioSmia further as an arena for commercialisation.	<b>FK, IN, RFF</b>  HKP U/UC environments Knowledge institutions Clusters, networks Business
Enhancing the knowledge/expert environment relating to food culture and the production and distribution of food	Strengthen the expert environment within precision agriculture and agriculture of the future	<b>FK, FM</b> NIBIO Apelsvoll Norwegian Agricultural Advisory Service
	Enhance networks and further develop links between the stakeholders	<b>FK, IN, FM</b> The food producers' marketing and distribution companies Innovation arenas for food producers Matmerk, NOFIMA

Strengthening industrial environments within the bioeconomy	Develop the Norwegian Wood Cluster collaboration further	<b>FK, IN</b> FM Business stakeholders
	Help to establish NTNU in Gjøvik as a leading expert environment in the development of the mechanical wood industry	<b>FK, RFF, IN</b> NTNU i Gjøvik NCE Raufoss The mechanical wood industry in the Inland Region The network related to forestry and the mechanical wood industry Tretorget
	Support the further development of Arena i4plastics with a focus on bioplastics and composites	<b>FK, IN, KUF Oppland</b> NTNU/SRM/i4plastics Business organisations Other private stakeholders
	Contribute to industry networks within bioenergy	<b>FK, FM, IN</b> Business stakeholders U/UC environments
<b>Strategy S2:</b> <b>Initiate research, development and innovation projects/programmes (multidisciplinary/intersectoral/international)</b>		
Measures area	Measures	Responsibility and partners
Applying for and implementing research and innovation programmes/projects (R&DI)	Prioritizing the bioeconomy in the letter of assignment for Innovation Norway and in the use of development funds	<b>FK and FM</b>
	Establish schemes that can be applied to for regional R&DI initiatives	<b>FK/RFF, FM</b> NFR U/UC environments RDA Regional business
	Develop and participate in Inter-Reg projects, national research project, and contribute to participation in EU programmes	<b>FK</b> EU BioInn (EU network Inland Region) The Norwegian Association of Local and Regional Authorities U/UC environments Business
Contribute to the development of the biofuel refining industry <sup>1)</sup>	Contribute financially to establishing Bio4Fuel, research centre for biofuels <sup>2)</sup> under the auspices of NMBU.	<b>FK</b> A broadly composed consortium of county authorities, business stakeholders and knowledge environments, nationally and internationally
	Contribute to the establishment of pilot-scale biorefining for residual materials from agriculture and forestry	<b>FK, IN, RFFI, FM</b> R&D environments Business
Connecting commercial environments (nationally/internationally) to extract synergies	Facilitate concrete collaboration between specialist environments/areas	<b>FK</b> R&D environments Business NFR
	Attract alliance partners with expertise we do not possess in the region	
	Survey opportunities for bioprospecting	

Strategy S3: Secure relevant and attractive expertise		
Measures area	Measures	Responsibility and partners
Ensuring relevant and attractive higher education and academic environments within the bioeconomy	Help to establish the Inland Norway University of Applied Sciences as a leading environment in the field of biotechnology and the development and use of resources in outlying land	<b>FK</b> The Inland Norway University of Applied Sciences Business
	Contribute to the creation and development of Evenstad Innovation Centre as a resource centre within commercialisation and innovation.	<b>FK</b> The Inland Norway University of Applied Sciences SIVA NFR
	Help to establish NTNU in Gjøvik as a leading expert environment in the development of the mechanical wood industry	<b>FK</b> NTNU in Gjøvik Wood industry in the Inland Region
Ensure relevant and attractive education at upper secondary school and technical college level within the bioeconomy	Develop an educational programme within sustainable development in upper secondary school	<b>FK</b> Agricultural industry The food industry Business
	Strengthen and develop vocational programmes aimed at the bioeconomy	<b>FK, technical schools</b> Business
	Develop and ensure further and continued education for the agricultural industry	<b>FK, FM</b> Agricultural industry Courses and educational institutions
	Demand/stimulate apprentice places	<b>FK</b> Business Agricultural organisations
Attract the necessary expertise to the region	Support a recruitment initiative	<b>FK</b> Business Clusters
	Develop cooperation agreements with expert environments outside the region	<b>FK</b> Business Clusters U/UC environments



## 2. Market and competitiveness

**Goal:** The Inland Region must have attractive entrepreneurial and development environments for bio-based value creation.

### Strategy S4:

#### Facilitate the effective establishment of bio-based industry and commerce

Measures area	Measures	Responsibility and partners
Efficient planning processes	Active advice for municipalities and strengthen the expertise base with respect to efficient land use planning	<b>FK, FM</b> Municipalities The municipalities' organisations U/UC environments
	Early dialogue with the municipalities in planning processes	<b>FK, FM</b>
Upgrade and adapt infrastructure, ensure efficient product streams	Improve bottlenecks on county roads for industrial purposes	<b>FK, FM</b> Norwegian Public Roads Administration Industry and business organisations Municipalities
	Advocacy work in relation to key road and rail authorities	<b>FK</b> Industry and business organisations Ministries and agencies
	Establish a project for increased investment in forest roads in cooperation with business and based on existing surveys.	<b>FM</b> FK Business Municipalities

### Strategy S5:

#### Work to attract investors and entrepreneurs

Measures area	Measures	Responsibility and partners
Market the Inland Region to relevant environments, nationally and internationally	Establish tools for systematically attracting companies, capital and expertise to the Inland Region and facilitate instruments for risk capital.	<b>FK</b> Innovation Norway Municipalities Business Klosser Innovasjon Clusters Financial environments

<b>Strategy S6:</b> <b>Work to increase market opportunities for bio-based products</b>		
Measures area	Measures	Responsibility and partners
Bioenergy	Start using biofuels in the region's public transport	<b>FK</b> Biofuel producers Research environments
	Encourage the use of biofuels in the construction and transport sectors.	<b>FK</b> Biofuel producers
	Vocational subjects of agriculture in upper secondary school	<b>FK</b> Biofuel producers
	Increase use of waterborne heating in public construction projects.	<b>FK, FM</b> Municipalities Energigården, Miljøcampus Evenstad
Use of wood in construction	Demand and give weight to life cycle analyses when making purchases for public buildings	<b>FK, FM</b> The construction industry Construction industry organisations Municipalities Consultancies Architects
	Develop an "expert programme for increasing the use of wood in the Inland Region"	<b>FK, FM</b> Municipalities Consultancies The construction industry Architects U/UC environments
Develop the use of the region's food resources	Contribute to the restructuring and development of the food industry in the Inland Region	<b>FK, FM, IN</b> Food industry clusters/networks Upper secondary schools/technical schools U/UC environments
	Consciously use of local foods at public events and when the strategy owners serve food.	<b>FK, FM, IN</b> Clusters/networks for local food producers Upper secondary schools U/UC environments The knowledge parks The food industry Stakeholders in nature-based tourism
Result-oriented use of public procurements/purchases to support innovation and development	Teach public stakeholders and purchasers	<b>FM, FK</b> Municipalities



### 3. Biological resources and return streams

**Goal:** The Inland Region must be a leader in the development of the sustainable and knowledge-based production and use of bioresources

#### Strategy S7:

**Contribute to increased sustainable production in agriculture, forestry and inland fish of high-quality and, wherever possible, based on inland resources**

Measures area	Measures	Responsibility and partners
Increased sustainable production in agriculture with targets I	Rollover regional rural development programme, including regional industrial, environmental and forestry/climate programmes	<b>FM</b> FK IN Business Municipalities
	Support measures for exploiting residual resources and measures for reducing reliance on imported feed products	<b>FM</b> FK Business Municipalities
Increased production of forests and quality wood	Support the further development of the Norwegian Forest Seed Centre	<b>FM, FK</b> Norwegian Forest Seed Centre Business
	Contribute to the establishment of a processing centre for forest plants in Biri	<b>FM</b> Business Norwegian Forest Seed Centre
	Strengthen long-term investments related to the building up and management of forests	<b>FM</b> Municipalities
Inland fish	Facilitate an increased focus on fish farming in the Inland Region in line with sustainability principles	<b>FK, FM</b> Municipalities IN Business stakeholders Klosser Innovasjon
	Facilitate and mobilise for increased catches of wild fish	<b>FK, FM</b> Business stakeholders

#### Strategy S8:

**Work towards the sustainable and knowledge-based management of the region's bioresources**

Measures area	Measures	Responsibility and partners
Protecting and developing the resource base	Develop and emphasise a soil protection strategy in all social development	<b>FM, FK</b> Municipalities
	Develop the forestry and wood strategy further	<b>FM, FK</b> Business U/UC environments
	Work for a national agricultural policy that facilitates the active exploitation of the resources in outlying land.	<b>FK, FM</b> U/UC environments Agricultural organisations

<b>Strategy S9: Further develop the regional exploitation of parallel/return streams (circular economy)</b>		
Measures area	Measures	Responsibility and partners
Developing systems for return streams from households and business, etc.	Stimulate research and innovation in the use of return streams	<b>FK</b> Rubbish collection companies Municipalities Consultancies Research institutes Business
Promoting the development of the circular economy	Support initiatives aimed at increasing the utilisation rate for biological parallel streams/residual products	<b>FK, FM, RFF, IN</b> NFR U/UC environments Agricultural organisations Municipalities Business Rubbish collection companies
<b>4. Cooperation</b>		
<b>Goal:</b> The Inland Region's focus on the bioeconomy must provide the basis for a joint, result-oriented effort that is attractive to all relevant stakeholders and binding for all those involved.		
<b>Strategy S10: Encourage more cluster projects and strengthen the interaction between stakeholders within innovation (triple helix, R&amp;D institutions, business and funding agencies)</b>		
Measures area	Measures	Responsibility and partners
Increased mobilisation for research	Establish a regional R&D project with a focus on the bioeconomy	<b>FK</b> NFR RFF Business
Cluster and network projects	Further develop and strengthen existing clusters and networks	<b>FK, IN</b> FM Heidner i4plastics Norwegian Wood Cluster U/UC environments
	Support new clusters and networks with good business anchoring	<b>FK, IN</b> FM Business stakeholders U/UC environments
<b>Strategy S11: Cooperation, simplification and coordination of the funding agencies for result-oriented funding allocation</b>		
Measures area	Measures	Responsibility and Partners
Establishing an effective and dedicated project management team to implement and monitor the strategy	Establish a project management team to implement and monitor the strategy	<b>FK, FM, IN</b> Business
	Draw up a binding "mayors' agreement for the Inland Region" for the implementation of agreed measures.	<b>FK</b> Municipalities The Norwegian Association of Local and Regional Authorities



## 5. Visibility and communication

**Goal:** The Inland Region must influence and be an active driving force in the bioeconomy and provide information to business and society.

### Strategy S12:

**Develop arenas for information, dialogue and cooperation further, including from an international perspective**

Measures area	Measures	Responsibility and partners
Creating and further developing regional meeting places focusing on the bioeconomy	In collaboration with business, arrange a bioeconomy conference at the end of 2017/start of 2018 and when the strategy is rolled out	<b>FK, FM</b> Business Clusters The expert environments
Council for Bioeconomic Growth in the Inland Region (BioCouncil)	Establish the BioCouncil with experts from R&D and business	<b>FK, FM, IN</b> Business Advocacy organisations The expert environments
	The BioCouncil must create and make use of the necessary functional networks	<b>FK</b> EU network Inland Region Other relevant networks

### Strategy S13:

**Raise the level of awareness in society and business of the need to shift to a circular economy based on biological resources and expertise**

Measures area	Measures	Responsibility and partners
Conduct coordinated and result-oriented advocacy work at all levels	General and specific advocacy	<b>FK, FM</b> BioCouncil Business Municipalities/regions Advocacy groupings (depending on case)
Common profile for the bioeconomy in the Inland Region	Develop a joint communication strategy	<b>FK, FM</b>
Highlighting the Inland Region's bioeconomic potential	Conduct a feasibility study based on the resource base	<b>FK, FM</b>

- 1) Biorefining:** Biorefining encompasses all of the processes that transform biomass into chemical products such as biofuels, heat and valuable chemicals/materials.
- 2) Biofuel:** Biofuels is a generic term for liquid or gaseous fuels based on biomass that can be used in internal combustion engines. There are currently three types of biofuel: biodiesel, bioethanol and biogas.

### Abbreviations used in the action plan:

U/UC environments: University/university college environments:

R&D environments: Research and development environments

FK: County authority/county authorities

IN: Innovation Norway

FM: County governor

NFR: Research Council of Norway

SIVA: SIVA SF

SRM: SINTEF Raufoss Manufacturing

HKP: Hedmark Knowledge Park

KUF-Oppland: Kompetanse-, universitets- og forskningsfondet i Oppland AS

KS: The Norwegian Association of Local and Regional Authorities

# Annex B

## Activities

In connection with the work on the bioeconomy strategy, contact meetings have been held with relevant environments to gain input for the work. Regional stakeholders within agriculture and food (both small-scale and industrial-scale), the university and university college environments, the biotechnology/reproductive environment in Hamar, applied ecology, rubbish collection and forestry/wood have been contacted in connection with this. Seminars have also been held on the topics of biotechnology and reproduction, bioenergy and forestry industries. In addition to this, a workshop was held with stakeholders in bio-based industries to get input for the bioeconomy strategy. The following table provides an overview of the completed activities.

When	Type and topic	Who/what?
04.02.2016	Contact meeting Bioeconomy strategy in general	Ministry of Trade, Industry and Fisheries
12.02.2016	Contact meeting Applied ecology, Reproduction and biotechnology	Inland Norway University of Applied Sciences, Campus Evenstad
17.02.2016	Contact meeting Forestry and wood	Skogoffensiven
18.02.2016	Seminar Reproduction and biotechnology	Heidner, Inland Norway University of Applied Sciences, Norsvin, Graminor, Hedmark Knowledge Park
23.02.2016	Contact meeting, Forestry and wood	Tretorget
01.03.2016	Contact meeting, Forestry and wood	NTNU Gjøvik, Tretorget
09.03.2016 10.03.2016	Participation and contributions Bioeconomy strategy in general	Østerdal Conference
11.03.2016	Bioeconomy strategy in general	Young Entrepreneurship
17.03.2016	Bioeconomy strategy in general	Innovation Norway
17.03.2016	Bioeconomy strategy in general	County education boards
29.03.2016	Contact meeting, Bioeconomy strategy in general	International cooperation, Oppland and Hedmark county authorities
05.04.2016	Seminar Bioenergy, Forestry and wood	Avinor, Treklyngen, Eidsiva Bioenergi, Energigården, Inland Norway University of Applied Sciences
06.04.2016	Reproduction and biotechnology	Inland Norway University of Applied Sciences, Campus Hamar
06.04.2016	Forestry and wood	Seminar the Mjøsa element Wooden buildings Inland Region
07.04.2016	Follow-up meeting with wood builders, forestry and wood	NTNU in Gjøvik, Skogoffensiven, Tretorget



08.04.2016	Contact meeting Partially fermented trout	Valdres Rakfisk
08.04.2016	Contact meeting Local food	Små Vesen, County Governor of Oppland, Moahaugen Gård
08.04.2016	Going abroad, Bioeconomy strategy in general	Region Värmland
11.04.2016	Contact meeting with the food industry, Agriculture and food	Food industry – Tine Frya
19.04.2016	Status update, Bioeconomy strategy in general	Joint county council meeting
22.04.2016	Contact meeting Local food Nord-Gudbrandsdal, Agriculture and food	Sve Gard, Gudbrandsdalsmat/Billingen Seterpensjonat, Avdem Gardsysteri
26.04.2016	Bioeconomy strategy in general	Skåppå
04.05.2016	Seminar on the forestry industry Forestry and wood	Industry seminar
09.05.2016	Contact meeting Food and agriculture	Food industry – Nortura
10.05.2016	Contact meeting Households, business and municipalities – waste and recycling issues	Waste and recycling – GLØR
13.06.2016	Contact meeting Agriculture	Agricultural unions
16.08.2016	Workshop Bioeconomy strategy	
12.09.2016	Participation conference Bioeconomy	The green shift, Prøysenhuset
22.09.2016	Participation conference Bioeconomy	Biotown The Inland Region – a powerhouse for the bioeconomy
24.10.2016	Contact meeting Food – expertise project	Terningen nettverk
25.11.2016	Draft strategy distributed for contributions with a deadline of 10 February 2017	Publicly available
29.11.2016	National Bioeconomy Strategy published	The government
22.02.2017	Final steering group meeting	Steering group, incl. observer (IN)

## Resolution from the joint County Council (April 2017)

- The county council adopts "Bioeconomic Strategy for the Inland Region 2017-2024. A business strategy and action plan».
- The action plan is updated within the current planning period together with key players in the region.
- A steering group of 4 representatives from the strategy owners is appointed; one from each of the two county councils and one from each of the two County Governors. Innovation Norway Innlandet is invited to participate as an observer in the steering group.
- The Steering Group creates a Council of Bioeconomic Growth (BioCouncil) with 6-8 members based on input from project management

# Annex C

## The steering group for the bioeconomy strategy for the Inland Region

The steering group consists of representatives from Oppland and Hedmark county authorities and from the county governors of Hedmark and Oppland, as well as an observer from Innovation Norway Hedmark:

Thomas Breen (Ap)	County commissioner responsible for (among other things) business, Hedmark County Authority. Chair of the steering group.
Aud Hove (Sp)	Chairman of the committee on industry, the environment and, Oppland County Authority. Deputy chair of the steering group.
Kari-Anne Jønnes (H)	Leader of the opposition, Oppland County Authority.
Rune Øygarden (H)	Leader of the opposition, Hedmark County Authority.
Trond Carlson	Team leader, industry and society, Oppland County Authority.
Birgit Aasgaard Jenssen	County manager for industry and innovation, Hedmark County Authority.
Bente Odlo	Director of Agriculture, County Governor of Oppland.
Haavard Elstrand	Director of Agriculture, County Governor of Hedmark.
Christian Hedløy Engh (observatør)	Director, Innovation Norway – Inland Region.





Foto: Bård Løken, Norsk skogmuseum



Foto: Torfinn Kringlebøtn



Foto: Akvakultur i Vesterålen AS og Sigerfjord Fisk AS



Foto: Silje Ludvigsen, Mjøsen skog