



Federal Ministry  
of Education  
and Research

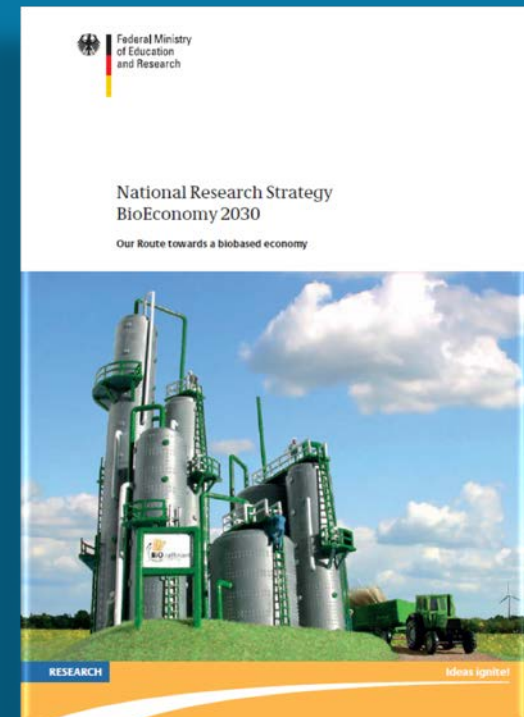


# “Bioeconomy 2030” The German National Research Strategy

CASA SCAR National Meeting Greece  
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[www.nks-lebenswissenschaften.de](http://www.nks-lebenswissenschaften.de)





# Knowledge-based Bioeconomy: Vision and Objectives



**Germany pursues the vision of a natural, cycle-oriented, sustainable bio-based economy,**

- › which carries the promise of global food supplies that are both, ample and healthy,
- › and of high quality products and services from renewable resources.

With our research, we want to meet our responsibilities for global nutrition, the protection of the climate, efficient use of resources, and the environment.

# How do we define a „Bioeconomy“?

## Consumer

- *Socio-economics*
- *Logistics*
- *Construction*
- *Trade*



## Production

- *Agri-tech*
- *(Mol.) Biology,*
- *Soil, Plant, Animal*



*Systems analyses*

**VALUE CHAINS  
& NETS**

*Sustainability*

## Valorisation

- *Food,*
- *Feed*
- *Fiber,*
- *Fuel*



## Conversion

- *Process tech*
- *Biotechnology*



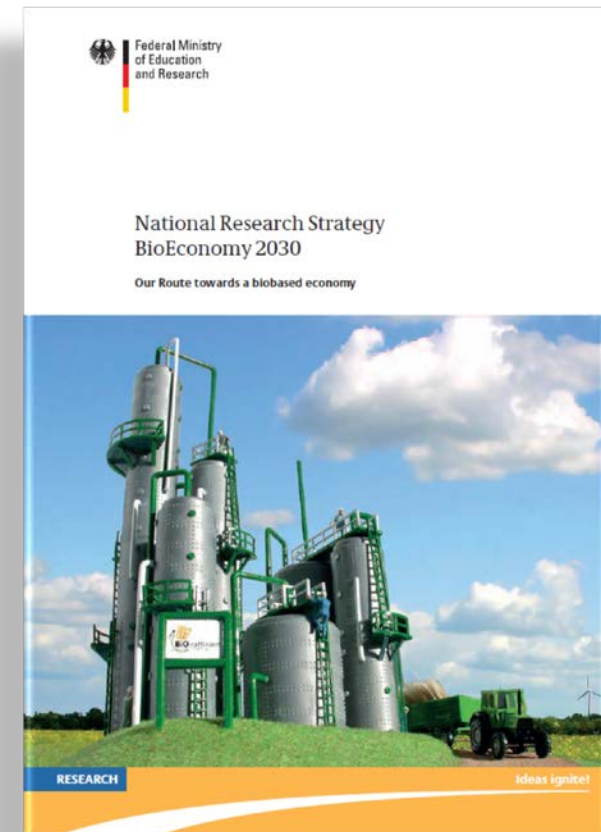
# National Research Strategy Bioeconomy 2030

## Lead: Federal Ministry of Education and Research (BMBF)

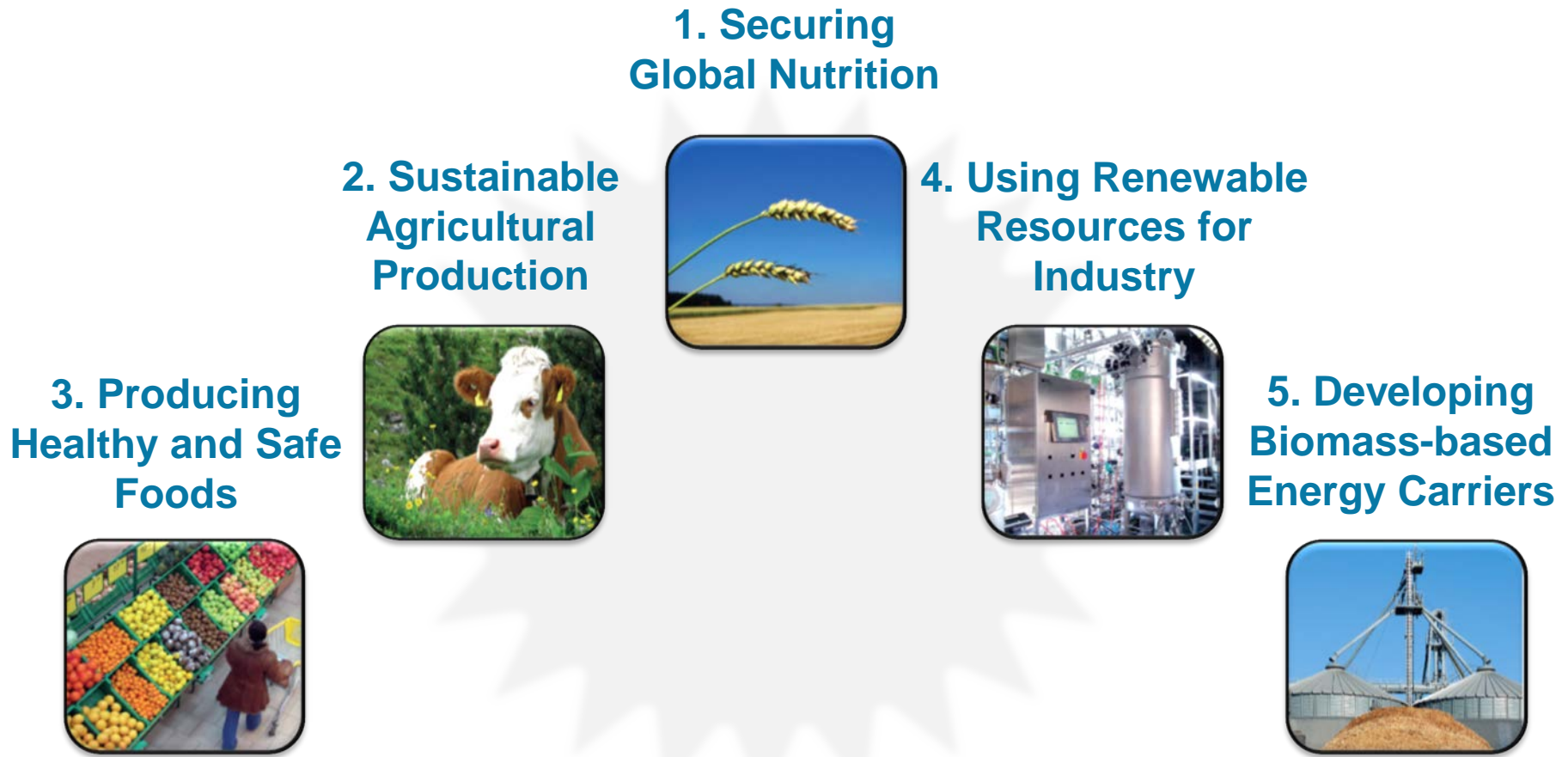
- FM of Food and Agriculture (BMEL)
- FM Economic Affairs and Energy, FM Economic Cooperation and Development, FM Environment...
- Research Institutes: HGF, WGL, FhG, MPG
- Industry
- 16 Federal States

***Start in Nov 2010!***

Project funding	~1,457 Mio € (FMs total)
Institutional funding	~976 Mio € (FMs total)
<b>Total funding</b>	<b>~2,400 Mio €</b>



# NFSB 2030 – Lines of Activity



# NFSB 2030 – Cross-cutting Activities



- 1. Support of industry (mainly SME as the main driver for industrial innovation).**
- 2. Use the potential of international cooperation.**
- 3. Build interdisciplinary competence and knowledge.**
- 4. Intensify the dialogue with the society.**



# Policy Strategy for Co-operation in Bioeconomy

## *Inter- and cross-departmental policy strategy (2013)*

**BMEL**

**Federal Ministry of Food and Agriculture (primary responsibility)**

**BMBF**

**Federal Ministry of Education and Research**

**BMWi**

**Federal Ministry for Economic  
Affairs and Energy**

**BMZ**

**Federal Ministry for Economic  
Cooperation and Development**

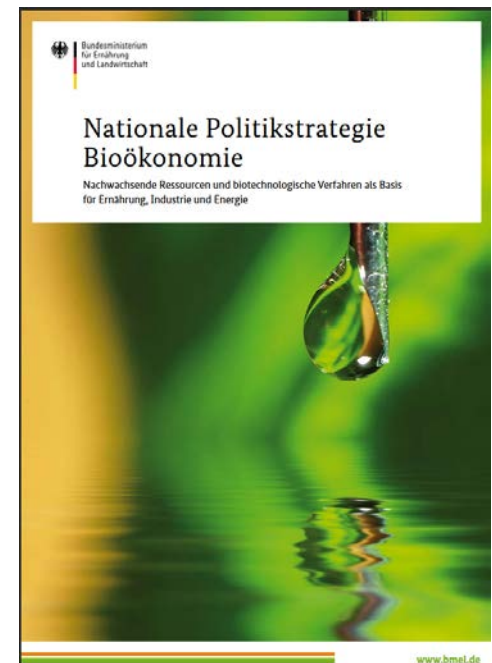
**BMU**

**Federal Ministry for the Environment,  
Nature Conservation, Building and  
Nuclear Safety**

**BMVI**

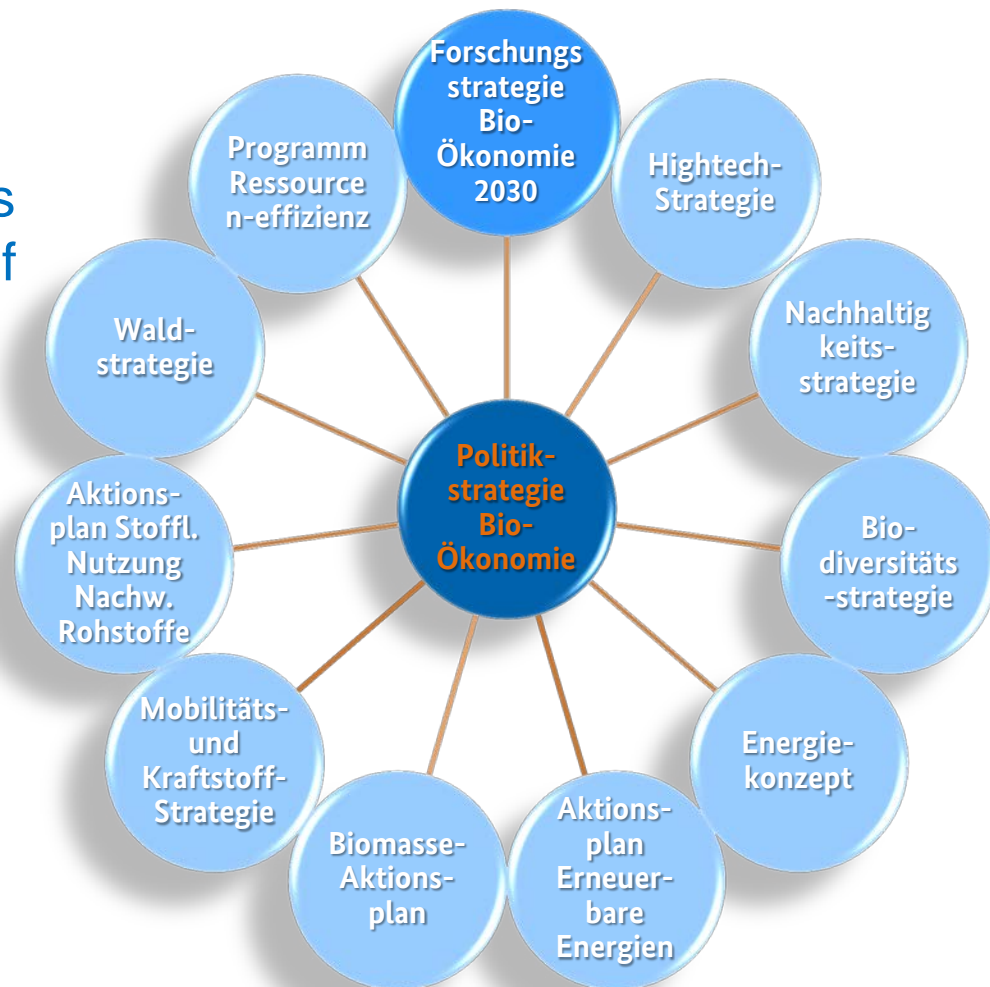
**Federal Ministry for Transport and digital Infrastructure**

*Establishment of an  
interministerial working  
group (IMAG)*



## Aims

- Interdepartmental co-ordination of national concepts and strategies in the context of bioeconomy
- Development of lines of activities for further ministries
- Recommendations for international competitive, sustainable bioeconomy exceeding pure research and innovation activities
- Coherent bioeconomy policy for all ministries





# NFSB 2030 – Implementation

## European and **international** cooperation/funding:

European Phenotyping Initiative (EPPN)  
ESFRI EMPHASIS

SusCrop  
SUSFOOD



Cofund in Biotechnology CoBioTech

Successor of:

- ERASysApp
- ERASynBio
- ERA IB (I-III)

FACCE-JPI

- MACSUR
- ERA-Net Plus
- Cofund Surplus



FP7 ERA-Net for  
Marine Biotechnology



**GlobE**



**Bioeconomy  
International**

EuroTransBio Pro

# The German Bioeconomy Council

Phase I: January 2009 – May 2012

Phase II: Since September 2012 - ...



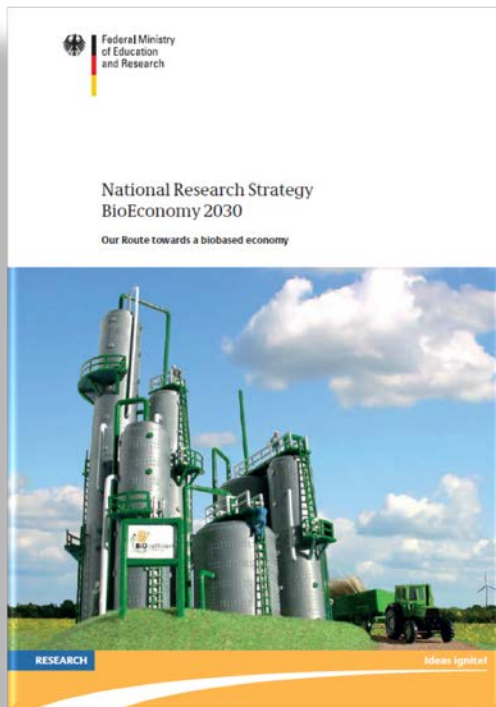
- Advising the federal government.
- Setting up/promotion of societal dialogue.
- Recommendations for funding in education, research, and development.

<http://www.biooekonomierat.de>



# Evaluation of NFSB 2030 (I)

- BMBF has launched an evaluation at the end of the first 7 year life-time.
- *Ex-post* & *ex-ante* evaluation by Fraunhofer Institute for Systems & Innovation Research

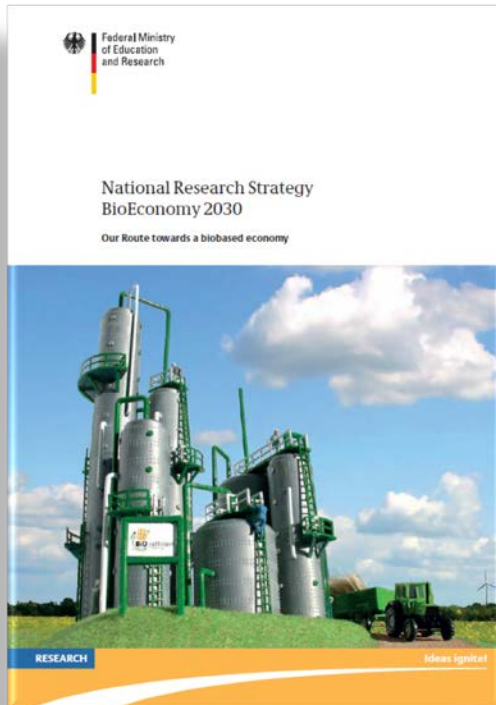


- Online survey and telephone interviews.
- Publication of results in April 2017.
- 36 initiatives amounting to 1,800 projects.
- 876 + 281 Mio. € funding.
- 60% academic projects and 40% SME projects.
- 2/3 as cooperative projects and 1/3 single projects.
- ~ 25% international projects.
- Unfortunately only available in German



# Evaluation of NFSB 2030 (II)

## Main results



- The funded initiatives successfully allowed for the development of a knowledge-based bioeconomy and the respective transfer into practical use.
- Research funding successfully brought together relevant players along different value chains.
- Portfolio of measures covered area of precompetitive research from basic research to applied research and development.

# Future of the National Research Strategy

- Update / revision process starts in June 2018
- Involvement of all relevant Federal Ministries
- By the end of 2018: first draft; further timeline unclear





# ***Thank you***

FOR MORE DETAILS SEE:

[HTTPS://BIOOEKONOMIE.DE/EN](https://biooekonomie.de/en)