

Horisont 2020

Secure, clean and efficient energy

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Science meets industry, 2014-05-14

Innhold

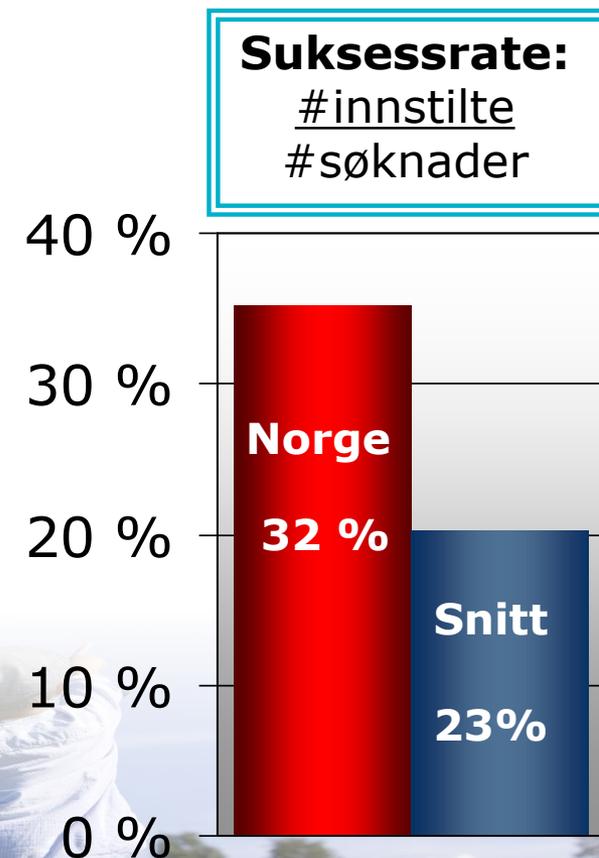
- Litt motivasjon
- Generell informasjon om Horisont 2020
 - Hva er nytt?
- Calls of specific interest
- Muligheter for SMBer
- Bistand fra Forskningsrådet



Litt motivasjon

- eksempel fra FP7 Energy

- Innstilte prosjekter:
 - Deltagelser i 74 prosjekter, dvs. i hvert femte (+FCH JU)
 - EU støtte til norske: over **500 mill. kr**
 - Involvert i prosjekter med samlet EU-støtte på over **3 mrd. kr**
 - 13 med norsk koordinator
- Søknader:
 - Deltagelser i 229 søknader
- Høyt tilslag (suksessrate)
- Få aktører bærer deltagelsen





- The Framework Programme for Research and Innovation
- Period: 2014 – 2020
- Approx. € 79.4 billion funding (current prices)
- First Work Programme 2014-2015 published & calls open

Horizon 2020 – Different from FP7

- A strong challenge-based approach, considerable freedom for applicants to come up with technological solutions
- Broader topics, less prescription of technology options, strong emphasis on expected impact
- Addressing the whole innovation chain : integration of research and innovation by providing coherent funding from idea to market
- A strategic programming approach: strategic programming exercise
- Work programmes with 2 year duration
- Leitmotif of this first work programme: contribution of Horizon 2020 to tackle the economic crisis and the path to sustainable growth
- Key drivers : competitiveness, innovation and growth, leverage of industry, access to finance, new knowledge and skills, enabling technologies....



Strategic planning

2014	2015	2016	2017	2018	2019	2020
Strategic Programme						
Work Programme 1 (plus tentative information for 2016)		Strategic Programme				
		Work Programme 2 (plus tentative information for 2018)		Strategic Programme		
				Work Programme 3 (plus tentative information for 2020)		
						Work Programme 4

Excellent Science

European Research Council (ERC)

Future & Emerging Technologies (FET)

Marie Skłodowska Curie Actions

Research Infrastructures

Competitive Industries

Innovation in SMEs

Access to Risk Finance

Leadership in Enabling and Industrial Technologies

Better Societies (Societal Challenges)

Health, demographic change and wellbeing

Food security, sustainable agriculture, forestry, marine, maritime, inland water and **bio-economy**

Secure, clean and efficient energy

Smart, green and integrated **transport**

Climate action, environment, resource efficiency and raw materials

Inclusive, innovative and reflective societies

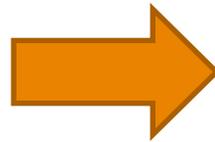
Secure societies



What is new?



- Cooperation
 - **Theme Energy**



- CIP
 - **Intelligent Energy Europe (IEE)**

Horizon 2020

- Societal Challenges
 - **Secure, clean and efficient energy**

15 of 50 topics in 2014/15 Energy WP identified as "IEE" type (11,9% of Energy budget)

Technology Readiness Level - TRL

- TRL 0: Idea
- TRL 1: Basic Research
- TRL 2: Technology formulation
- TRL 3: Applied Research
- TRL 4: Small Scale Prototype Development Unit (PDU)
- TRL 5: Large Scale Prototype Development Unit
- TRL 6: Prototype System
- TRL 7: Demonstration System
- TRL 8: First of the kind commercial System
- TRL 9: Full commercial application

See also:

- *Rules for Participation: OECD definitions*
- *A European strategy for Key Enabling Technologies – A bridge to growth and jobs, COM(2012) 341, 2012-06-26*

Types of action

- **Research and innovation actions (RIA)**

Action primarily consisting of activities aiming to **establish new knowledge** and/or to **explore the feasibility of a new or improved** technology, product, process, service or solution. For this purpose they may include basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment.

Funding rate: 100 %

- **Innovation actions (IA)**

Action primarily consisting of activities directly aiming at **producing plans and arrangements or designs for new, altered or improved** products, processes or services. For this purpose they may include **prototyping, testing, demonstrating, piloting, large-scale product validation and market replication.**

Funding rate: 70 % (non-profit legal entities: 100 %)

Types of action (2)

- **Coordination and support actions (CSA)**

Actions consisting primarily of **accompanying measures** such as standardisation, dissemination, awareness-raising and communication, networking, coordination or support services, policy dialogues and mutual learning exercises and studies, including design studies for new infrastructure and may also include complementary activities of strategic planning, networking and coordination between programmes in different countries.

Funding rate: 100 %

Calls of specific interest

- **LCE 1 – 2014: New knowledge and technologies**
 - Type of action: Research and Innovation actions.
 - TRL: Bring proposed technology solutions from TRL 2 to TRL 3-4.
 - Søknadsfrist: Stage 1: 01/04/2014, stage 2: 23/09/2014
 - Budsjett: 2-4 mill. Euro per prosjekt

- **LCE 2– 2014/2015: Developing the next generation technologies of renewable electricity and heating/cooling**
 - 2014:** *Develop control strategies and innovative substructure concepts*
 - 2015:** *Substantially reduce the costs of wind energy*
 - Type of action: Research and Innovation actions.
 - TRL: Bring proposed technology solutions TRL 3-4 to TRL 4-5.
 - Søknadsfrist: 2014: Stage 1: 01/04/2014, stage 2: 23/09/2014
2015: Stage 1: 03/09/2014, stage 2: 03/03/2015
 - Budsjett: 3-6 mill Euro per prosjekt

Calls of specific interest

- **LCE 3 – 2014/2015: Demonstration of renewable electricity and heating/cooling technologies**
 - 2014:** *Demonstrating and testing of new nacelle and rotor prototypes*
 - 2015:** *Demonstrating innovative substructure and floating concepts*
 - Type of action: Innovation action
 - Søknadsfrist: 10/09/2014 and 03/03/2015
 - Budsjett: 5-20 millioner Euro per prosjekt

- **LCE 4 – 2014/2015: Market uptake of existing and emerging renewable electricity, heating and cooling technologies**
 - Type of action: Coordination and Support Actions.
 - TRL: Technologies that are on TRL 7-9.
 - Søknadsfrist: 07/05/2014 and 03/03/2015
 - Budsjett: 1-2 mill. Euro per prosjekt

Calls of specific interest

- *Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing*
 - **Call for Nanotechnologies, Advanced Materials and Production**
 - **Call for FoF - Factories of the Future**



Phase 3 & coaching ~ 2% budget

Phase 1: Concept and feasibility assessment

Input: Idea/Concept: "Business Plan 1" (~ 10 pages)
10% budget

Activities:
Feasibility of concept
Risk assessment
IP regime
Partner search
Design study
Pilot application
etc.

~ 10% success

Output: elaborated "Business plan 2"

Lump sum: 50.000 €
~ 6 months

Phase 2: R&D, demonstration, market replication

Input: "Business plan 2" plus description of activities under Phase 2 (~ 30 pages)
90% budget

Activities:
Development, prototyping, testing, piloting, miniaturisation, scaling-up, market replication, research

~ 30-50% success

Output: "investor-ready Business plan 3"

~ 1-2.5 M€ EC funding
~ 12 to 24 months

0.5 – 2.5M€

Phase 3: Commercialisation

Promote instrument as quality label for successful projects

Facilitate access to private finance

Support via networking, training, information, addressing i.a. IP management, knowledge sharing, dissemination

SME window in the EU financial facilities (debt facility and equity facility)

Possible connection to public procurement activities

SME- instrument – Energy

- Søknadsfrister

Topic	Deadlines			
	2014		2015	
SIE 1	Phase 1	Phase 2	Phase 1	Phase 2
[SME]	18/06/2014	09/10/2014	[18/03/2015	[18/03/2015
Open call cut-off dates	24/09/2014	17/12/2014	17/06/2015	17/06/2015
	17/12/2014		17/09/2015	17/09/2015
			16/12/2015]	16/12/2015]
SIE 2				

Bistand fra Forskningsrådet National Contact Point (NCP)

- **Hjelp og bistand, bl.a:**
 - Råd og veiledning
 - Søknadsteknisk
 - Strategisk
 - Faglig veiledning / vurdering (med bistand fra bl.a. fagansvarlige)
 - Nettverk, kontakter, partnersøk
 - “Mock evaluation” / “Forevaluering”
 - Kontakt med kommisjonen
 - Løpende prosjekter
 - Workshops
 - ...
- Infobrev
- Prosjektetableringsstøtte (PES)
- Medvirkningsordningen (MVO) ENERGIX og CLIMIT



Prosjektetableringsstøtte (PES)

- Støtte for utarbeiding av søknad til Horisont 2020
- Støttebeløpene varierer, bl.a:
 - rolle og budsjett i det planlagte hovedprosjektet, antall norske aktører som deltar i søknaden, type prosjekt
- Støtten fra Forskningsrådet maksimalt 50 % av påløpte kostnader.
- Minimumskrav: Søknad vurdert som «eligible».
- Ekstra støtte innvilges dersom søknaden er kvalifisert for støtte (over threshold).
- Tilleggsstøtte til kontraktsforhandlinger.
- <http://www.forskningsradet.no/pes2020>



HORIZON 2020

The EU Framework Programme for Research and Innovation

European Commission > Horizon 2020

- Home
- What is Horizon 2020?
- Find Your area
- How to Get funding?
- News & Events
- Multimedia & Publications
- Project Stories



Horizon 2020 web:
ec.europa.eu/programmes/horizon2020/
Participant Portal:
ec.europa.eu/research/participants/portal/

News & Events

Horizon 2020 launched with €15 billion over first two years
Wed, 11 Dec 2013

The European Commission has today for the first time presented calls for projects under Horizon 2020. Worth more than €15 billion over the first two years, the funding is intended to help boost Europe's knowledge-driven economy, and tackle issues that will make a difference in people's lives. Read more



#H2020

[Voice of Researchers](#)
@Research_Voice

Developing a research agenda: contributing new #knowledge via intent

Kontaktinformasjon



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Supplerende informasjon

- Arbeidsprogrammet for energi:

[http://ec.europa.eu/research/horizon2020/pdf/work-programmes/secure clean and efficient energy draft work programme.pdf](http://ec.europa.eu/research/horizon2020/pdf/work-programmes/secure_clean_and_efficient_energy_draft_work_programme.pdf)

- Deltakerregler (Se under "dokumenter" øverst til høyre)

<http://www.forskningsradet.no/prognett-horisont2020/Forside/1253988679397>