

Horisont 2020

Sikker, ren og effektiv energi

*Mari Lyseid Authen NCP Energi, Forskningsrådet
Industry meets Science, 2016-06-21*



Forstå Horisont 2020 på under 5 min



HORISONT 2020

Forstå Horisont 2020 på fem minutter
Denne introduksjonsfilmen gir deg en innføring i hva Horisont 2020 er, hva som skal til for å få tilslag med et prosjektforslag og hva du får ut av å forske og skape innovasjon med midler fra EUs rammeprogram Horisont 2020.

Dato :19.05.2015



<http://tinyurl.com/H2020-film>

Er F&I-midler fra EU noe for oss?

Redusere risiko

Nye nettverk hjemme og ute

Penger og investorer

Anerkjennelser

Nye markeder

Vokse og bli robust

Kunnskap / innovasjon

Økt konkurransekraft



Main project types (formally «Action types»)

Research and Innovation Actions RIA	Funding rate: 100 % + 25 % flat-rate overhead
Innovation Actions IA	Funding rate: 70 % (except for non-profit legal entities, where a rate of 100 % applies) + 25 % flat-rate overhead
Coordination and support actions CSA	Funding rate: 100 % + 25 % flat-rate overhead



- Tidsaspekt
 - 8 mnd. til kontrakt
- Nye aktører
 - Sluttbruker og næringslivet er viktige
- Gode betingelser for næringslivet
 - IPR: <https://www.iprhelppdesk.eu/>



TECHNOLOGY READINESS LEVEL



RESEARCH & INNOVATION

European
Commission

Participant Portal

European Commission > Research & Innovation > Participant Portal > Home



- **Horisont 2020 (EC)**
ec.europa.eu/programmes/horizon2020/
- **Deltakerportalen**
ec.europa.eu/research/participants/portal/



Relevant calls 2016 2017

Excellent Science

European Research Council (ERC)

Future & Emerging Technologies (FET)

Marie Skłodowska Curie Actions (MSCA)

Research Infrastructures (RI)

Industrial Leadership

Innovation in SMEs

Access to Risk Finance

Leadership in Enabling and Industrial Technologies (LEIT)

- LEIT ICT
- LEIT NMP+Bio
 - PPP EeB
 - PPP FoF
 - PPP Spire

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 efficient and raw materials

Inclusive, innovative and reflective **societies**

Secure societies

Spreading Excellence and widening participation

Science with and for society

Joint Technology Initiatives (JTIs)

- **FCH JU**
- ...

The 2016-2017 calls of the Energy Challenge

Energy Efficiency (EE)

- Heating and Cooling
- Engaging consumers
- Buildings
- Industry, services and Products
- Innovative financing

Competitive low-carbon energy Technologies (LCE)

- Energy system (grids, storage)
- **Renewable energies**
- Decarbonising fossil fuels
- Socio-economic research
- European Research Area in energy

Smart Cities and Communities (SCC)

- Light-house demonstration projects

SME instrument (SIE)

Call budgets (in Mio €)

Call	2016	2017
EE	93	101
LCE	352,66	367,62
SCC	60	71,50
SME	46	50

Wind Energy

- New knowledge and technologies (LCE-6-2016)
 - Improved understanding of the physics of wind as primary resource and wind energy technology
- Developing the next generation technologies for renewable electricity and heating/cooling (2016-2017)
 - **Wind Energy:** Reduction of environmental impact energy

TRL 4 –
technology
validated in lab

TRL 4 – TRL 4-5
technology validated
in lab
TRL 5: –
technology validated
in lab

Wind Energy

- Solutions for reduced maintenance, increased reliability and extended life-time of offshore wind turbines/farms (LCE 13–2016)
- Demonstration of large >10MW wind turbines (LCE 14–2017)
- Market uptake of renewable energy technologies (LCE-21-2017)
 - **Wind energy:** *Increasing the market share of wind energy systems*

TRL 7 – system
prototype
demonstration in
operational
environment

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Multi-use of the oceans marine space, offshore and near-shore: Enabling technologies

Type: IA

Frist: Februar 2017

Topic ID: BG-04-2017

- Multi-use platforms
- Combinations of innovative technologies and methods including automation and remote monitoring technologies, flexible structures and facilities

Infodager (med forbehold):


- 20. september 2016 - LCE - virtuell infodag, ikke fysisk event i Brussels
- 3. Oktober 2016- energy storage and smart grid – Brussels





Process next WP

WP 2018-2019 (2020)

- 6/16 Outline strategic approach
 - 10/16 Scoping paper
 - 12/16 Outline of actions included in WP
 - 2-9/17 Draft versions of WP
 - End 17 Final WP
- 



Horizon 2020 results
Energy 2014 (2015)

Results H2020 Energy 2014 - 2016 calls

Accumulated results

H2020 Energy calls 2014 - 2016	Proposals						Proposals		
	All			w/Norwegian partner(s)			Norwegian Coordinator		
	# proposals	# retained	Success rate	# proposals	# retained	Success rate	# prop.	# retained	Success rate
EE	1053	111	10,5 %	69	11	15,9 %	17	2	11,8 %
LCE	764	143	18,7 %	130	26	20,0 %	28	6	21,4 %
SCC	80	9	11,3 %	5	1	20,0 %	0	0	-
SUM	1897	263	13,9 %	204	38	18,6 %	45	8	17,8 %

- EE Energy Efficiency
- LCE Competitive Low-Carbon Energy
- SCC Smart Cities and Communities

- 2016: Only H2020-EE-2016-1, H2020-LCE-2016-ETP and H2020-LCE-2016-RES-CCS-RIA

Low Carbon Energy (LCE) - Projects with NO participation 2014

- **LIFES 50plus** Qualification of innovative floating substructures for 10MW wind turbines and water depths greater than 50m.
 - LCE-02, RIA, **Marintek**, **Dr.Techn OO**
- **DESCRAMBLE** Drilling in supercritical geothermal condition
 - LCE-02, RIA, **Sintef**, **Sintef Petroleum**
- **EMPOWER** Local Electricity retail Markets for Prosumer smart grid pOWER services
 - LCE-07, IA, **Smart Innovation Østfold**, **eSmart System**, **Fredrikstad Energi Nett**, **Schneider Electric Norge**
- **UPGRID** Real proven solutions to enable active demand and distributed generation flexible integration, through a fully controllable LOW Voltage and medium voltage distribution grid
 - LCE-07, IA, **POWEL**
- **CEMCAP** CO2 capture from cement production
 - LCE-15, RIA, **Sintef Energi**, **Norcem**
- **M4ShaleGas** Measuring, monitoring, mitigating managing the environmental impact of shale gas
 - LCE-16, RIA, **Sintef Petroleum**
- **GATEWAY** Developing a Pilot Case aimed at establishing a European infrastructure project for CO2 transport
 - LCE-19, CSA, **Sintef Energi**
- **NATCONSUMERS** NATural Language Energy for Promoting CONSUMER Sustainable Behaviour
 - LCE-20, CSA, **Statens inst. for Forbruksforskning**

Low Carbon Energy (LCE) - Projects with NO participation

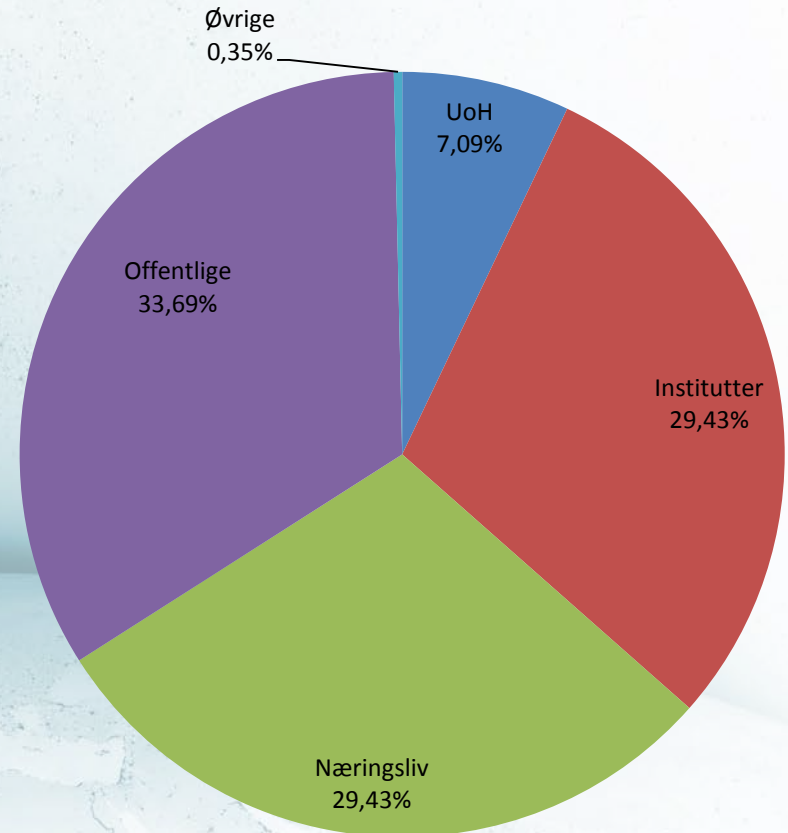
2015

- **GeoWell** Innovative materials and designs for long-life high-temperature geothermal wells
 - LCE-02, RIA, **IRIS, Statoil Petroleum**
- **DEEPEGS** Deployment of deep enhanced geothermal systems for sustainable energy business
 - LCE-03, IA, **Statoil Petroleum**
- **DEMOGRAVI 3** Demonstration of the GRAVI 3 technology – innovative gravity foundation for offshore wind
 - LCE-03, IA, **Global Maritime AS**
- **PROMOTION** Progress on Meshed HVDC Offshore Transmission Networks
 - LCE-05, IA, **Statoil, Statkraft**
- **SmartNet** Smart TSO-DSO interaction schemes, market architectures and ICT Solutions for the integration of ancillary services from demand side management and distributed generation
 - LCE-06, RIA, **Sintef Energi, Sintef**
- **STEMM-CCS** Strategies for Environmental Monitoring of Marine Carbon Capture and Storage
 - LCE-15, RIA, **UiB, Uni Research, UiT, NIVA**
- **SET-Nav** Navigating the Roadmap for Clean, Secure and Efficient Energy Innovation
 - LCE-21, RIA, **SINTEF, NTNU**

Andel deltakelser i innstilte prosjekter

- Stor næringslivsandel blant innstilte prosjekter
- Næringslivet og det offentlige mottar hhv 30 % og 34 % av samlet EU-støtte

EU-støtte H2020 Energi





Bistand fra Forskningsrådet

NCP Nasjonale kontaktpunkter



- Veiledning
- 1:1 møter
- Refleksjonsmøter
- Skisse evaluering
- Retorikk kurs
- PES 2020 og POS 2020

Kontaktinfo:

www.forskningsradet.no/horisont2020

Work as expert for the Commission?

RESEARCH & INNOVATION
Participant Portal

European Commission > Research & Innovation > Participant Portal > Experts

HOME FUNDING OPPORTUNITIES HOW TO PARTICIPATE **EXPERTS** SUPPORT Search PP LOGIN REGISTER

News

H2020 call for expression for interest for experts (11/2013) New calls for expression of interest for individual experts and for organisations to suggest experts were just published in OJ C342 of 22 November 2013. European Commission will soon need experts to evaluate first

Experts H2020 ONLINE MANUAL

Join the database of independent experts for European research and innovation.

The European research proposals design of

Year	Cooperation		
	NO	Tot	% NO
2007	3	104	2,9
2008	4	327	1,2
2009	3	294	1,0
2010	0	66	0,0
2011	4	157	2,5
2012	2	128	1,6
2013	1	162	0,6
Sum navn	17	1 238	1,4 %

New experts

who can be an expert?

Register at Participant Portal

Forskningsrådets havteknologisatsing 2016

Skal stimulere overføring av kompetanse og teknologi på tvers av havbaserte næringer for å skape nye arbeidsplasser

➔ Fellesutlysninger mellom flere programmer: frist 12. okt.

Har som mål å mobilisere **leverandørnæringene** til å se **nye muligheter for teknologiutvikling og anvendelse på tvers av de ulike havbaserte næringene og i et internasjonalt perspektiv**

Se www.forskningsradet.no/havteknologi



FORSIDEN

Om satsingen

Kontaktpersoner

Utvexling av kunnskap og teknologi på tvers av sektorer kan åpne nye muligheter for vekst i norske havnæringer. Forskningsrådet ønsker å stimulere til dette ved å koordinere innsatsen i

Utlysninger

Alle utlysninger fra Forskningsrådet

Kontaktpersoner

HORIZON 2020

INTERDISCIPLINARITY / VALUE CHAINS / COOPERATION / QUALITY / INNOVATION
WHAT DO YOU WANT TO USE IT FOR?



**Marianne Haavardsholm
Aandahl**

mhaa@rcn.no

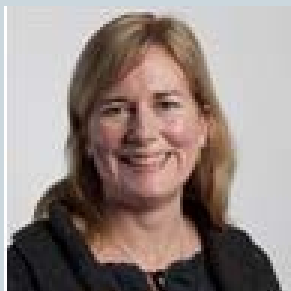
NCP med fokus på
petroleumsnæringen



Mari Lyseid Authen

mlau@rcn.no

NCP Energi



Janicke Anne Giæver

jag@rcn.no

NCP Klima og Miljø



Innovasjon Norge:
Bedriftsmuligheter i Horisont
2020

Kontakt lokal EU-rådgiver:
Sølvi Silset – E-post:
solvi.silset@innovasjon norge.no



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