

# Regionalt samarbeid- Green Deal

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## Treffpunkt Green Deal 10.09.20

**KYRRE ÅS**, leder for EU-enhet Vest UiS/NORCE/HVL/SUS/VID,  
Prosjektleder Horisont Vest- EU mobiliseringsnettverk

# Horisont Vest (EU-mobiliseringsnettverk finansiert av NFR)

- 6 prosjekter er finansiert (totalt ca. 600 mill. kr)
  - God mobilisering i klyngene- H2020 er svært relevant!
    - Flere søknader hvor det offentlige har vært koordinator.
    - Mange søknader som partner
- Horisont Vest- Hovedaktiviteter:**
- Grant scan for klynger. Planlegge og gjennomføre workshops
  - H2020 Help desk aktiviteter (VIS og Valide)
  - Felles samling/tema for alle klynger (IKT/digitalisering)- Digital Innovation Hubs etc.
  - Møter i EU rådgiver forum (Vestland og Rogaland)
- ARENA: Smart city cluster, Tunel Safety Cluster, Norwegian Smart Care Cluster, Norwegian Offshore Wind Cluster, Norwegian Energy Solution, STIIM Aqua Cluster
  - NCE: Maritim CleanTech, Seafood Innovation Cluster, Media Cluster, Finance Innovation
  - GCE Ocean Technology

## Akademia og virkemiddelapparat

- UiS, NORCE, HVL, UIB, Rogaland fylkeskommune, Hordaland Fylkeskommune, Valide, VIS, Innovasjon Norge, regionskontorer i Brussel, NFR (regionale representanter)

Det offentlige er svært viktig i forhold til å være de som skal ta i bruk løsningene (impact).

# Klimanøytralt Europa innen 2050

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**Tverrfaglig og tversektorielt samarbeid.  
Samfunnsvitenskap. Grønn omstilling**

UiS arbeider nå med strategien fram mot 2030. Grønn omstilling står sentralt.

«Norge står foran en stor omstilling som vil prege Stavanger-regionen spesielt. Kunnskap må skapes for å utvikle næringsliv og samfunn i en retning som kan bidra til å løse de store utfordringene i vår tid».

Gi innspill til ny UiS-strategi (frist 15 september).

# Smart City Research Network, University of Stavanger (UiS)

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- The Research Network was established in 2019 to coordinate smart city research at UiS and to strengthen regional collaboration for research-based smart city innovation.
- 30+ Researchers from six faculties at UiS
- 9 PhD students.
- Involved in

We prioritize interdisciplinary research to understand and solve the challenges around livable, smart and sustainable cities.

# Green Deal Interests:

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## **Area 1: Increasing Climate Ambition: Cross sectoral challenges**

- LC-GD-1-2-2020: Towards Climate-Neutral and Socially Innovative Cities

## **Area 5: Sustainable and smart mobility**

- LC-GD-5-1-2020: Green airports and ports as multimodal hubs for sustainable and smart mobility

## **Area 6: Farm to Fork**

- LC-GD-6-1-2020: Testing and demonstrating systemic innovations in support of the Farm-to-Fork Strategy

## **Area 10 Empowering citizens for the transition towards a climate neutral, sustainable Europe**

- LC-GD-10-1-2020: European capacities for citizen deliberation and participation for the Green Deal
- LC-GD-10-2-2020: Behavioural, social and cultural change for the Green Deal
- LC-GD-10-3-2020: Enabling citizens to act on climate change, for sustainable development and environmental protection through education, citizen science, observation initiatives, and civic engagement

**Nettverket planlegger en workshop om Area 10**



# The European Green Deal Call

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Draft

8 principal areas + 3 supporting areas

Area 1:  
Increasing  
Climate  
Ambition:  
Cross  
sectoral  
challenges

€173M

Area 2:  
Clean,  
affordable  
and  
secure  
energy

€146M

Area 3:  
Industry  
for a clean  
and  
circular  
economy

€140M

Area 4:  
Energy and  
resource  
efficient  
buildings

€60M

Area 5:  
Sustainable  
and smart  
mobility

€100M

Area 6:  
Farm to  
Fork

€74M

Area 7:  
Biodiversity  
and  
ecosystem  
services

€80M

Area 8:  
Zero-  
pollution,  
toxic free  
environment

€60M

Area 9: Strengthening our knowledge in support of the European Green Deal

€65M

Area 10: Empowering citizens for the transition towards a climate neutral, sustainable Europe

€45M

Area 11: International cooperation

€40M

Draft indicative total budget: €983M



# A stepping stone towards Horizon Europe



European Green  
Deal Call

Excellent Science

Industrial Leadership

Societal Challenges

Spreading Excellence and widening participation

Science with and for society

Horizon 2020 (2014-2020)



Horizon Europe (2021-2027)

Other Union Programmes,  
including

Common Agricultural Policy      Erasmus  
LIFE      Innovation  
ERDF      Connecting Europe Fund  
External Facility Instrument      Internal Security Fund  
Maritime & Fisheries Fund      ESF+  
InvestEU      Digital Europe Space Programme  
Space Programme



Pillar 1  
Excellent Science



Pillar 2  
Global Challenges and European Industrial Competitiveness



Pillar 3  
Innovative Europe

Widening participation and strengthening the European Research Area

[https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme\\_en](https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme_en)



## Project types & Funding rates

<b>Research and Innovation Actions</b>  <b>RIA</b>	<b>100 % + 25 % flat-rate overhead</b>
<b>Innovation Actions</b>  <b>IA</b>	<b>70 %</b> <b>(non-profit legal entities: 100 %)</b> <b>+ 25 % flat-rate overhead</b>
<b>Coordination and support actions</b>  <b>CSA</b>	<b>100 % + 25 % flat-rate overhead</b>

**European Green Deal Call:**  
13 IA  
8 RIA  
2 CSA

**Note:** The Green Deal call is part of Horizon 2020 (rules, funding rates etc)

# Muligheter for UiS og regionen

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- **LC GD 1 2 2020: Towards Climate Neutral and Socially Innovative Cities** (Stavanger Kommune er sentral- Stavanger ønsker å bli en av de klimanøytrale byene innen 2030) Forskningsnettverket for smarte byer jobber tett med Stavanger kommune.
- **LC GD 5 1 2020: Green airports and ports as multimodal hubs for sustainable and smart mobility**- Future energy Hub og smart by nettverket. Enova prosjekt -Elnett21 shows how electric transport solutions for the 21. century will be in practice.
- **LC GD 6 1 2020: Testing and demonstrating systemic innovations in support of the Farm to Fork Strategy** (callen er presentert for Biorådet I Rogaland- STIIM er en potensiel søker)

# Muligheter for UiS og regionen (II)

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- **LC GD 2 1 2020: Innovative land based and offshore renewable energy technologies and their integration into the energy system.** Der er det nå er et eget punkt på land based renewable energy technologies (RIA)
- **Area 10 Empowering citizens for the transition towards a climate neutral, sustainable Europe** er svært aktuelt for UiS. Smart by nettverket vil arrangere et møte om disse utlysningene. Greenhouse ved UiS er koordinator for et H2020 prosjekt (EnvironCitizen) som er svært relevant i forhold til Green Deal utlysningen.

# Area 1: Increasing Climate Ambition: Cross sectoral challenges

- LC-GD-1-1-2020: Preventing and fighting extreme wildfires with the integration and demonstration of innovative means
- **LC-GD-1-2-2020: Towards Climate-Neutral and Socially Innovative Cities**
- LC-GD-1-3-2020: Climate-resilient Innovation Packages for EU regions



Topic 1.2

## **LC-GD-1-2-2020: Towards Climate-Neutral and Socially Innovative Cities**

### **Policy challenge**

- Currently 75% of European citizens live in cities and this percentage is expected to rise to 80% by 2050. Therefore, cities must play a crucial role in helping Europe reach the targets of the Green Deal.
- Objective of the topic: to support cities into using Green Deal-targeted technological, non-technological and social innovation to co-create, test and implement holistic & integrated solutions with citizens and trigger changes in social practices and behaviour.



## Scope of topic

- Establish a one-stop shop in partner cities to help them implement their climate action plans and related social innovation action plans
  - Providing technical, regulatory, financial & socio-economic expertise and assistance to cities
  - Partnership involving research organisations, academia, industry including social entrepreneurs, the financial sector including impact financiers, investors, philanthropists, NGOs, national and local authorities and citizens



## Scope, continued

### **Activity 1: Climate action plans and Green Deal innovation:**

- Develop: science-based indicators for assessing cities' climate neutral action plans (emissions reduction); innovative urban greening assessment methodologies for planning & monitoring emissions reduction; inter-operable and comparable cities evidence repositories
- Identifying regulatory, institutional, governance, financing, public acceptance, and other barriers preventing progress towards climate neutrality
- Sharing of experience and good practices between cities

### **Activity 2: Financial engineering**

- Identify strategies and financing solutions for cities to reach climate neutrality, building on existing practices developed by global, European and national initiatives and programmes



## Scope, continued

### **Activity 3: Social innovation and citizens' engagement**

- Combine existing results of EU R&I with social innovation, and take advantage of the digital transformation to co-create and test solutions with local communities, including changes in social practices and behaviour
- Support twinning and mentoring on Green Deal objectives between cities from different countries and different sizes and creating a European ecosystem of social innovation hubs and local communities

### **Activity 4: Research and Innovation for climate-neutral transformation of cities**

- Support large scale pilots for deployment of systemic solutions combining technological, social, cultural, regulatory and/or financial aspects, building on good practices available at local, national and/or European level



## Targeted impacts

- Climate neutrality by 2030 of the participating cities (and districts)
- Empower cities and local communities through social innovation to cross social tipping points and make the Green Deal happen
- Mobilise the demand (citizens' needs) to lead the transition to climate neutrality

## Budget (indicative!) and type of action

- Type of Action: Research and innovation action
- Size projects: 53 mill. euro
- Total budget topic: 53 mill. euro

# Missions

*Missions Area:*

*Adaptation to Climate Change, including  
Societal Transformation*

**Interim mission title:**

**Accelerating the transition to a climate prepared and resilient Europe by 2030.**

*Mission Area:*

*Climate-Neutral and Smart Cities*

**Interim mission title:**

**100 climate neutral cities by 2030 – by and for the citizens.**



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Contact persons Climate,  
environment, natural resources and  
raw materials (SC5, H2020)

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**National Contact Points, Research Council:**

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## Area 2: Clean, affordable and secure energy

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- LC-GD-2-1-2020: Innovative land-based and offshore renewable energy technologies and their integration into the energy system
- LC-GD-2-2-2020: Develop and demonstrate a 100 MW electrolyser upscaling the link between renewables and commercial/industrial applications  
Scope: The scope of this project is to install and operate a 100 MW electrolyser to produce renewable hydrogen, as energy carrier or as a feedstock..  
EUR 50 - 60 million, TRL 8
  - UiS arbeider nå med strategien fram mot 2030 (Grønn omstilling, Energi etc.)
  - Rogaland Fylkeskommune- Nye nærings- og innovasjonsstrategi (skal vedtas i fylkestinget i desember)



## Green Deal, Area 2, topic 2.1:

Innovative land-based and offshore renewable energy technologies and their integration into the energy system (RIA & IA)

“To decarbonise Europe, land-based and offshore renewables must become the main energy source.”

A Clean Planet for All, Nov. 2018 (EC’s Long Term Strategy, LTS)



### Sub-topic 1:

Land-based renewable energy technologies (RIA)

EUR 3 to 6 million , TRL 4-5

### Sub-topic 2:

Offshore renewable energy (IA)

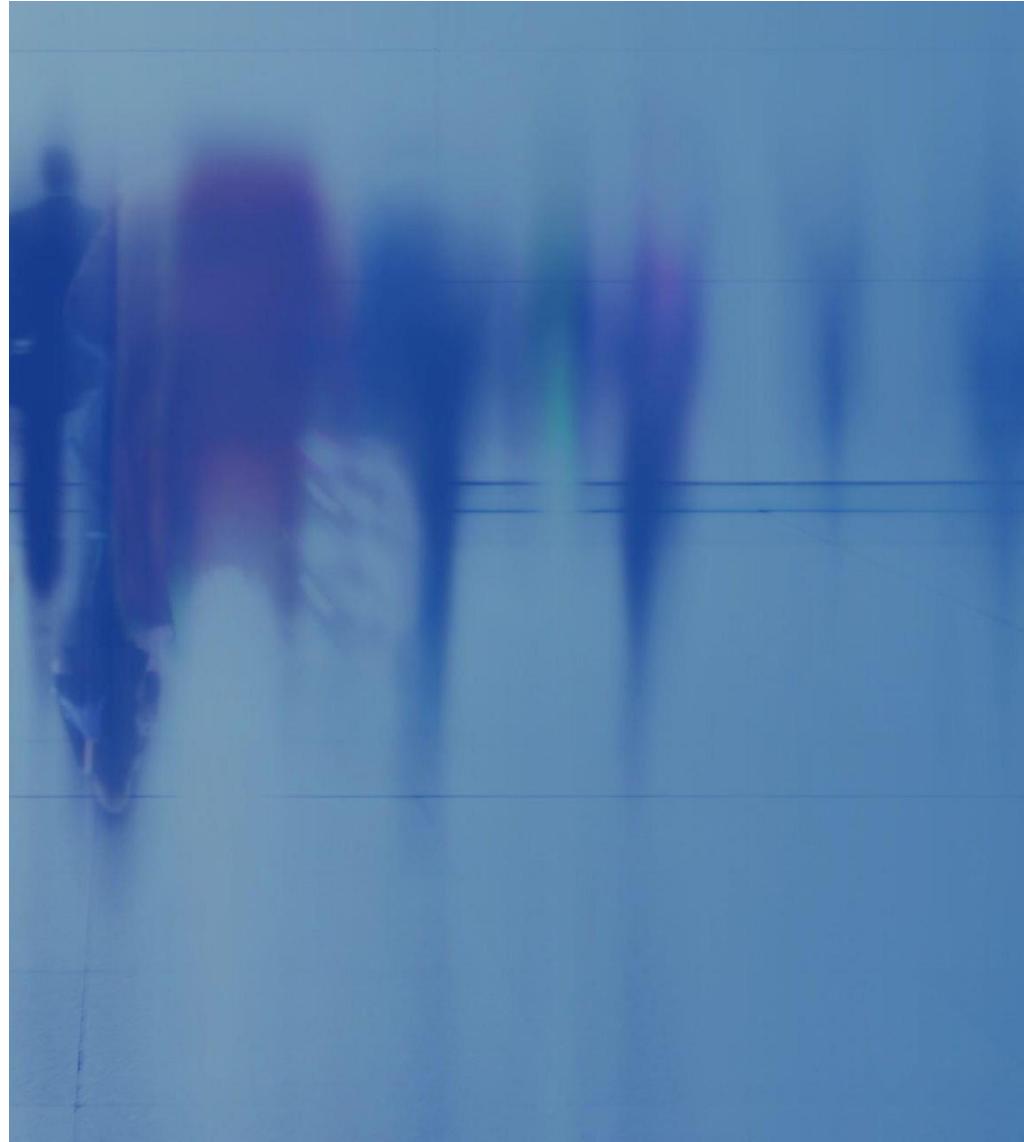
EUR 20 to 35 million , TRL7

# Green Deal, Area 2

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NCP Horizon Europe; Energy  
– The Research Council of Norway



# Area 3: Industry for a clean and circular economy

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- LC-GD-3-1-2020: Closing the industrial carbon cycle to combat climate change – Industrial feasibility of catalytic routes for sustainable alternatives to fossil resources

The challenge is to sustainably convert CO<sub>2</sub> emissions from industrial processes into synthetic fuels and chemicals utilising renewable energy driven processes with novel, highly optimised and energy efficient catalytic systems....

  - Demonstrate industrial and economic feasibility
  - Type of action: Innovation actions (IA) (min. 2 projects funded)
  - Up to EUR 40 million per project
- LC-GD-3-2-2020: Demonstration of systemic solutions for the territorial deployment of the circular economy
  - EUR 10 to 20 million , TRL6-7

# Sirkulærøkonomi- UiS/regionen

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- Mange muligheter for prosjektsamarbeid gjennom det nye rammeprogrammet for forskning og innovasjon, Horizon Europe (2021-2027).
- Nasjonal satsing på sirkulærøkonomi. Granavolden- ‘Norge skal være et foregangsland i utviklingen av en grønn, sirkulær økonomi som utnytter ressursene bedre, og utarbeide en nasjonalstrategi om sirkulær økonomi’. Les mer [her](#)
- UiS har arrangert en workshop hvor man samlet ca. 30 forskere på tvers av fakultetene for å kartlegge hvilke fakultet/forskningsmiljø som jobber med problemstillinger rundt sirkulær økonomi.
- Rogaland fylkeskommune er nå også i gang med å utvikle en smart spesialiseringssstrategi hvor bioøkonomi/sirkulær økonomi vil være viktig. Deltaker i relevant INTERREG prosjekt



## Indicative budget and proposals

- 74 mill. Euro indicated as total budget for Area 6
- Proposals from 6 to 12 mill. Euro under each subtopic
- 6 subtopics
- Innovation actions (IA)
- Proposals:
  - Test, pilot and demonstrate systemic solutions, **TRL 5-7**
  - Can include limited research activities to address specific gaps for solution building, testing and demonstration
  - innovative solutions to one of the six subtopics





## Subtopics (1)

- Subtopic A. [2021] Achieving **climate neutral farms** by reducing GHG emissions and by increasing farm-based carbon sequestration and storage (IA)
- Subtopic B. [2021] Achieving **climate neutral food businesses** by mitigating climate change, reducing energy use and increasing energy efficiency in processing, distribution, conservation and preparation of food (IA)





## Subtopics (2)

- Subtopic C. [2021] Reducing the dependence on **hazardous pesticides**; reducing the **losses of nutrients from fertilisers**, towards **zero pollution** of water, soil and air and ultimately fertiliser use (IA)  
**Important:** Proposals have to address all challenges (those related to pesticides, and to fertilisers, and to losses of nutrients) specified under Subtopic C.
- Subtopic D. [2021] Reducing the dependence on the **use of antimicrobials in animal production and in aquaculture** (IA)





## Subtopics (3)

- Subtopic E. [2021] Reducing **food losses and waste** at every stage of the **food chain** including consumption, while also avoiding **unsustainable packaging** (IA)
- Subtopic F. [2021] Shifting to **sustainable healthy diets**, sourced from land, inland water and sea, and **accessible to all EU citizens**, including the **most deprived and vulnerable groups** (IA)



## **Area 10: Empowering citizens for the transition towards a climate neutral, sustainable Europe**

- LC-GD-10-1-2020: European capacities for citizen deliberation and participation for the Green Deal
- LC-GD-10-2-2020: Behavioural, social and cultural change for the Green Deal
- LC-GD-10-3-2020: Enabling citizens to act on climate change, for sustainable development and environmental protection through education, citizen science, observation initiatives, and civic engagement

Innbyggerperspektivet og involvering er viktig i energi transformasjonen



# LC-GD-10-2-2020. Behavioural, social and cultural change for the Green Deal.

**Endringer i atferd, sosial praksis og kultur for å oppnå Green Deal-målene**

- **Partnere:** Forskningsinstitusjoner, offentlig sektor, NGOer, nasjonale og lokale administrative organer
- **Etterspurt ekspertise:** bl.a. samfunnsvitenskap, psykologi, antropologi, økonomi, historie, etikk
- **Virkninger og effekter:** systematisk endring i politikk, kultur, økonomi og samfunnet generelt

**Samarbeid med andre prosjekter gir synergieffekt**

**Relevante bakgrunnsdokumenter, bl.a.:**

[UN's Sustainable development report \(2020\)](#)

[Policy brief on citizen science](#)

**Verktøykasse:** [MoRRI](#)



[Research and Innovation Action \(RIA\), estimert budsjett per prosjekt 3-5 mill €, totalt 2-3 prosjekter](#)



# LC-GD-10-2-2020. Behavioural, social and cultural change for the Green Deal.

## EnviroCitizen – prosjekt koordinert av UiS

- Prosjektet undersøker hvordan aktiviteter knyttet til fuglekikking og fugletelling kan bidra til å styrke miljøbevissthet og grønt medborgarskap. Prosjektet engasjerer vanlige innbyggere og bruker **folkeforskning** som sin hovedmetode





# Green Deal – Indicative timeline

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- July Interservice consultation
- 17 September adoption of the Work Programme (WP) update - amendment to H2020 WP
- 18 September publication and **call opening**
- 22-24 September R&I-days - EU Research & Innovation Days (virtual event). E.g: 23/9 1400-1800: Info Day on the European Green Deal call
- 26 January 2021 Expected **call deadline**
- Feb-April 2021 Evaluation of proposals
- June 2021 Evaluation results (max 5 months after deadline)
- June-Dec 2021 Preparation & signature of Grant Agreement (max 8 months after deadline)  
(31 Dec: Last possible date for signature)

All topics follow a single-stage procedure



# The European Green Deal Call

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## The European Green Deal Call

- [https://ec.europa.eu/info/research-and-innovation/strategy/european-green-deal/call\\_en](https://ec.europa.eu/info/research-and-innovation/strategy/european-green-deal/call_en)
  - Draft call documents

## Funding & tender opportunities

- <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>

