

European Green Deal Call-

# Land use and climate change

Prof. Raisa Mäkipää,  
Natural Resources Institute Finland (Luke)

**European Green Deal** call will mobilise research and innovation to foster a just and sustainable societal transition aiming at ‘leaving nobody behind’

Projects are expected to deliver tangible and visible results relatively quickly and show how research and innovation can provide concrete solutions for the Green Deal main priorities

*call will support*

- **pilot applications, demonstration projects** and innovative products
- innovation for better governance of the green and digital transition
- social and value chain innovation aiming at ‘leaving nobody behind’.

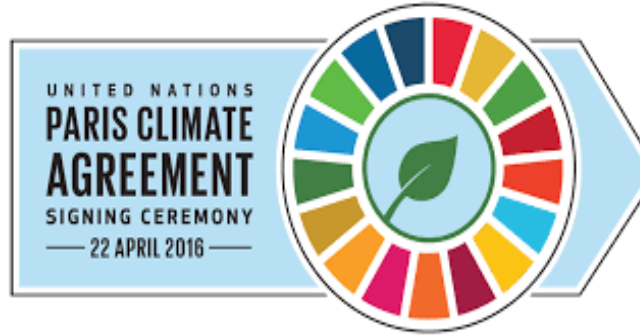
# Call areas related to land use and climate

Call area 1: Increasing climate ambition: cross-sectoral challenges

Call area 6: Farm to Fork

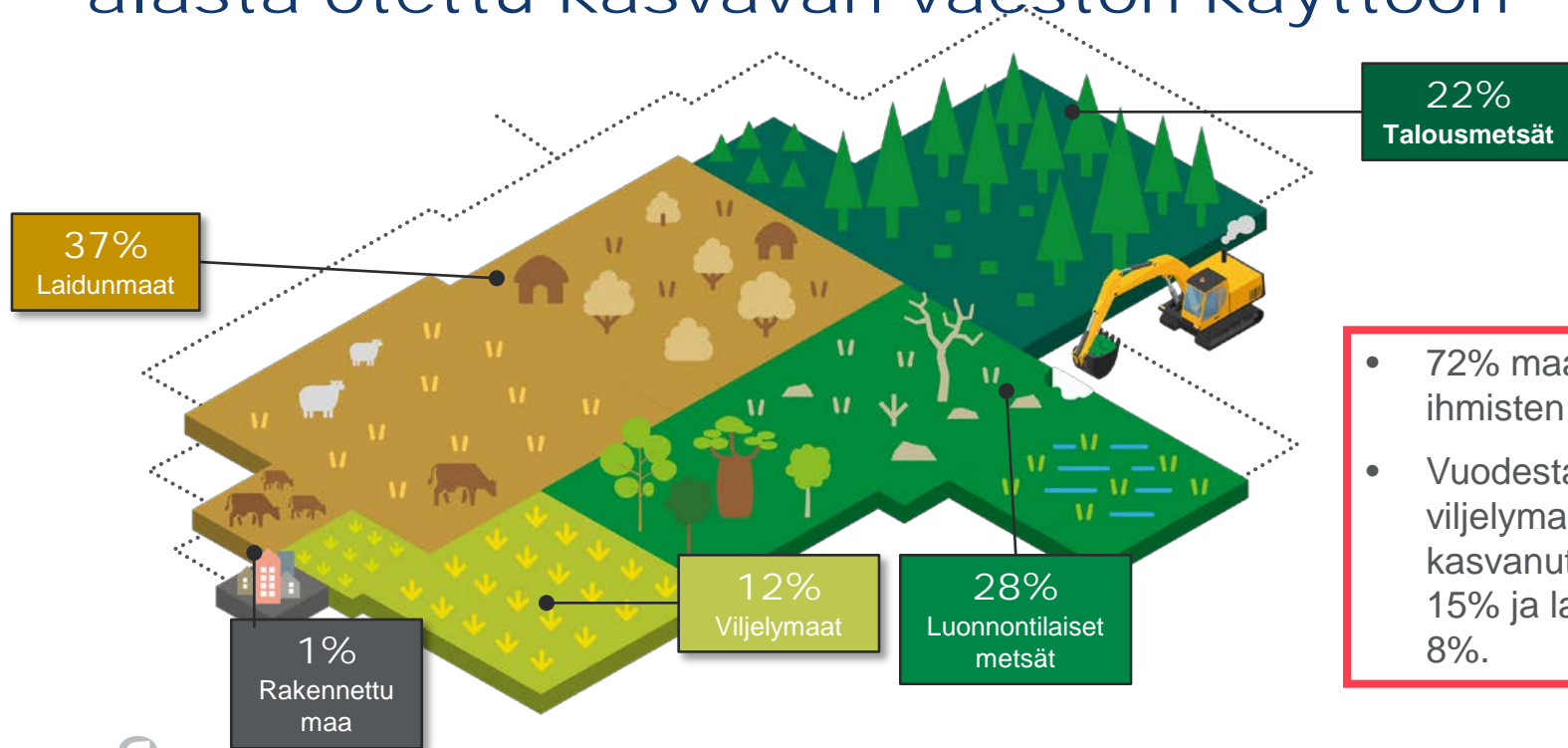
Call area 7: Restoring biodiversity and ecosystem services

# Land use sustainability – from global challenges



... to EU policies and strategies, incl updated Bioeconomy strategy (2018)....and European Green Deal

# IPCC SR Climate Change and Land: Ennennäkemättömän suuri osa maapinta- alasta otettu kasvavan väestön käyttöön



- 72% maapinta-alasta ihmisten käytössä
- Vuodesta 1961 viljelymaan pinta-ala kasvanut globaalisti 15% ja laidunmaan 8%.

# IPCC SR Climate Change and Land: Ruokajärjestelmän muutokset välttämättömiä



Kasvipainotteisemmat  
ravitsemussuositusten mukaiset  
ruokavaliot (tarvitsee pienemmän  
peltopinta-alan)



Ruokahävikin sekä korjuu- ja  
varastointihävikin välttäminen  
(nyk. 30 % korjatusta sadosta hukataan)



Resurssitehokkaampi  
alkutuotanto (pienempi peltopinta-ala  
riittää kun maaperän kasvukunto ylläpidetään)

Ruokajärjestelmä  
(sis. Varastoinnin,  
prosessoinnin, kuljet-  
uksen, jakelun ja  
käytön) aiheuttaa  
25-30 % kaikista  
kasvihuonekaasu  
päästöistä

## Call area 6: **Farm to fork** – system thinking, multi-actor and cross-sectoral approach. Scope

1. Achieving climate neutral **farms** (on land, water and sea) by reducing GHG emissions and by increasing farm-based C sequestration and storage;
2. Achieving climate neutral **food businesses** by mitigating climate change, reducing energy use and increasing energy efficiency in processing, distribution, conservation and preparation of food;
3. Reducing the dependence on contentious **pesticides and antibiotics**; reducing the use and increasing the efficiency of **fertilisers**; reducing the losses of nutrients from fertilisers, towards zero pollution;
4. Reducing **food losses** and waste, while avoiding unsustainable packaging;
5. Shifting to sustainable healthy **diets**

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

# Call area 7: Restoring biodiversity and ecosystem services

## LC-GD-7-1-2020: Restoring biodiversity and ecosystem services

**Demonstrate** how restoration (in structure, function and connectivity) of biodiversity and ecosystem services can be **scaled up** in regions with severe biodiversity loss, so that opportunities for substantial biodiversity and ecosystem services gains will be realised, which in turn deliver social and economic benefits.

Address the objectives of the European **Green Deal**, including the EU commitment to reduce emission by 50-55% by 2030 and become net **carbon-neutral** by 2050; the implementation of the EU **Biodiversity Strategy** for 2030[17] and the EU **Nature Directives**[18], the **Water and Marine Strategy** Framework Directives, the **Farm-to-Fork Strategy**, the **Pollinators** Initiative, the **Climate Law**, the **Bioeconomy Strategy** and Action Plan, EU **Urban** Policies, and the revised EU Adaptation Strategy; supporting the EU Covenant of Mayors, the Sendai Framework for Disaster Risk Reduction (2015-2030), the UN Decade of Restoration including land/sea degradation neutrality, and the UN Sustainable Development Goals (**SDG**);



## Proposals should address

- scalability plan and a process for commitments in adopting large-scale restoration within existing and also innovative governance and financing systems
- Setting baselines, goals and a monitoring framework for the projects
- Restoration actions should be paired with supportive and robust management practices that reduce pressures and direct habitat damage at the local scale, to support restoration efforts in the long term.
- Integrated into best practice monitoring activities within respective monitoring governance schemes.
- Projects should promote innovative funding, cross-sectoral collaborations and social participation to support the design, implementation and monitoring of sustainable and effective restoration efforts.

## Restoring biodiversity and ecosystem services

Test, demonstrate and promote systemic solutions for up-scaling the restoration of biodiversity and ecosystem services

### Targeted Impacts:

- Tested up-scaling of large-scale and urgent restoration actions on the ground, to prepare resilient ecosystems and their services at sea and on land
- Restoration actions are implemented which will enhance natural carbon sinks and reduce the effects of emissions, locally reverse biodiversity decline and improve the delivery of a range of ecosystem services (in the short- to long-term)
- Nature-based solutions are adapted, integrated and demonstrated in governance, financing, public procurement, economic development, infrastructure and regional strategic landscapes
- Demonstration of how restoration activities enable sustainable, climate-smart, inclusive, transformative approaches
- Value created for communities affected by transformative change through the restoration of their degraded terrestrial and marine environment
- Showcase how massive restoration can help enabling transformative change including of social and behavioural factors, which will be beneficial for biodiversity

**Goal** is

sustainable societal transition,  
high impact in relatively short time scale,  
scalability of the solutions,  
carbon neutral Europe.

Thank you