

# LIFE Platform meeting Climate Strategic Integrated Projects

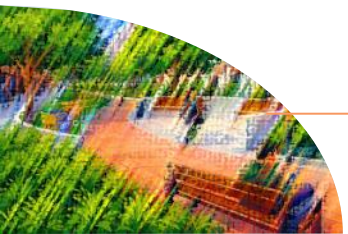
21-23 April 2026, Bilbao

**ACE LIFE: scaling up climate impacts  
and funding for emission reductions  
in the ESR sector in Finland**

*Introductory presentation, Working Group  
1.2*

**Dr. Karoliina Auvinen**, ACE LIFE project  
Director, Finnish Environment Institute &  
**Miia Berger**, Climate Funding work package  
Leader, Finnish Ministry of the Environment

# Introduction and general scope of ACE LIFE project



# ACE LIFE project: Accelerating climate efforts and low-emission investments in Finland

**Goal:** Support Finland to reach it's -50% GHG emission reduction obligation by 2030 compared to 2005 in the effort sharing sector, set in EU regulation 2023/857

**Focal points:** To reduce hard-to-abate emissions in agriculture, heavy transport, mobile machines and SME's industrial processes.

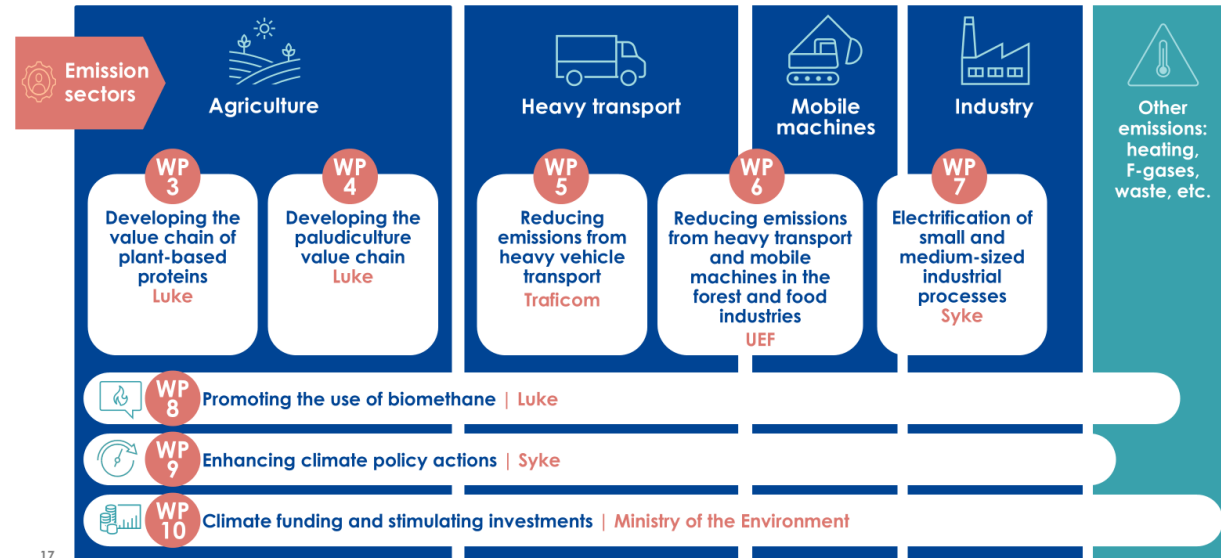
**How:** ACE LIFE supports the implementation of Medium-Term Climate Policy Plan through stakeholder engagement, pilots, increased knowledge base and influencing policies.

**Duration:** 2024–2030 (7 years)

**Budget:** EUR 20 million

**Main funder:** The LIFE programme of the European Union

**Consortium:** More than 50 organizations from public administration, research institutions, private enterprises and foundations



Dr. Karoliina Auvinen, Finnish Environment Institute



## Coordinator of the project



Suomen ympäristökeskus  
Finlands miljöcentral  
Finnish Environment Institute

## Leaders of the work packages



UNIVERSITY OF  
EASTERN FINLAND

**TRAFICOM**

Liikenne- ja viestintävirasto  
Transport- och kommunikationsverket  
Finnish Transport and Communications Agency



Suomen ympäristökeskus  
Finlands miljöcentral  
Finnish Environment Institute



Ympäristöministeriö  
Miljöministeriet  
Ministry of the Environment

## Project partners receiving funding



Centre for Economic Development,  
Transport and the Environment



LUT  
University



Metsä



METSÄHALLITUS  
FORSTSTYRELSEN  
MEHCIRÁÐDEHUS



Metsäteho



PLUGIT™



POHJASET



storaenso

TAH

TIINA JA ANTTI  
HERLININ SÄÄTIÖ

**TOIJALA WORKS**  
Engineering Your Vision



TUORETIE  
luotettavaa logistiikkaa



## Associated partners



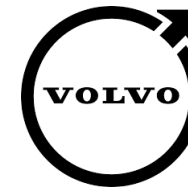
Finnish Food and Drink Industries' Federation



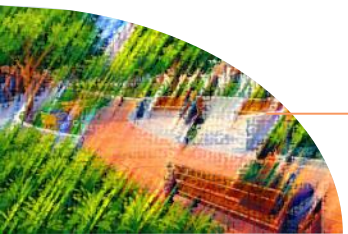
Maa- ja metsätalousministeriö  
Jord- och skogsbruksministeriet  
Ministry of Agriculture and Forestry



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# Challenges and barriers encountered for investment mobilization and replication



# Challenging situation: Finland's public finance and climate policy landscape

## Early 2020s in Finland saw emergence of climate change as a top-tier policy goal

- Climate Act revision in 2022 made carbon neutrality target by 2035 legally binding
- Left-wing coalition government 2019-2023 prioritized climate as a policy item
- Climate policy seen as an integral part of industrial and financial/economic policy; EU Green Deal and post-COVID recovery

## 2022: Russia's invasion war in Ukraine results in energy shocks, supply chain effects and regional economic impacts

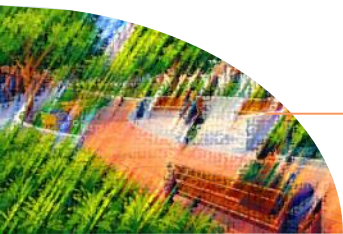
## 2023: prolonged economic downturn, minimal growth and pressures on public finances

- Rise in public debt, low consumer confidence, severe downturn in key export sectors and construction sector
- Right-wing coalition formed after election in 2023 has prioritized fiscal discipline, competitiveness and public-sector austerity; views of coalition parties on climate and emission reduction measures is a lot more mixed (issue of intra-governmental contention)

## 2025: Parliamentary debt brake agreement set to extend strict fiscal discipline into foreseeable future

- Cross-party political agreement: reduction of debt-to-GDP ratio by 0.75 %-points annually; public debt to 60% of GDP and later 40 %; strict deficit ceiling of 2,5 % for national/regional/local authorities
- Strict austerity and fiscal policy expected after parliamentary elections in 2026
- This framework is also expected to strict limits on public climate finance expenditure
- Any new or increased public expenditures face considerable scrutiny in the current political landscape

Dr. Karoliina Auvinen, Finnish Environment Institute



# Challenges to replicate ACE LIFE pilots and model investments

- ACE LIFE pilots several emission reductions measures:
  - Paludiculture to reduce emissions from peat degradation in agricultural lands
  - Electric and biomethane trucks, mobile machines, steam boilers and ovens to replace oil and diesel
  - Plant-based proteins to replace meat and dairy products
- Investments are **not yet economically viable** for companies and farmers without public sector's support
  - Capacity building, stakeholder engagement and sharing best practices are not enough for scale up
- Replication of emission reduction actions requires policy and finance interventions from policy makers: grants, taxes, risk-sharing instruments for mobilizing private capital and/or other economic steering instruments
- Due to economic and policy planning challenges, ACE LIFE activities currently lack public funding & proper policy mixes

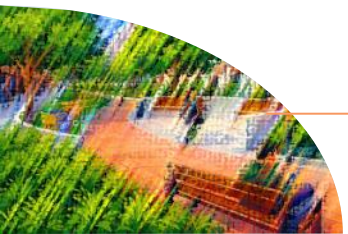


Dr. Karoliina Auvinen, Finnish Environment Institute

# Approach for investment need identification and funding mobilization in ACE LIFE

## Main strategies to tackle climate funding challenges:

- Improved information on climate funding gaps and available financing sources
- Creating policy and finance recommendations to overcome financing gaps and for reaching emission reduction targets
- Developing a tool for prioritizing most impactful emission reduction measures with more scarce public resources



# Methods used to map financing gaps

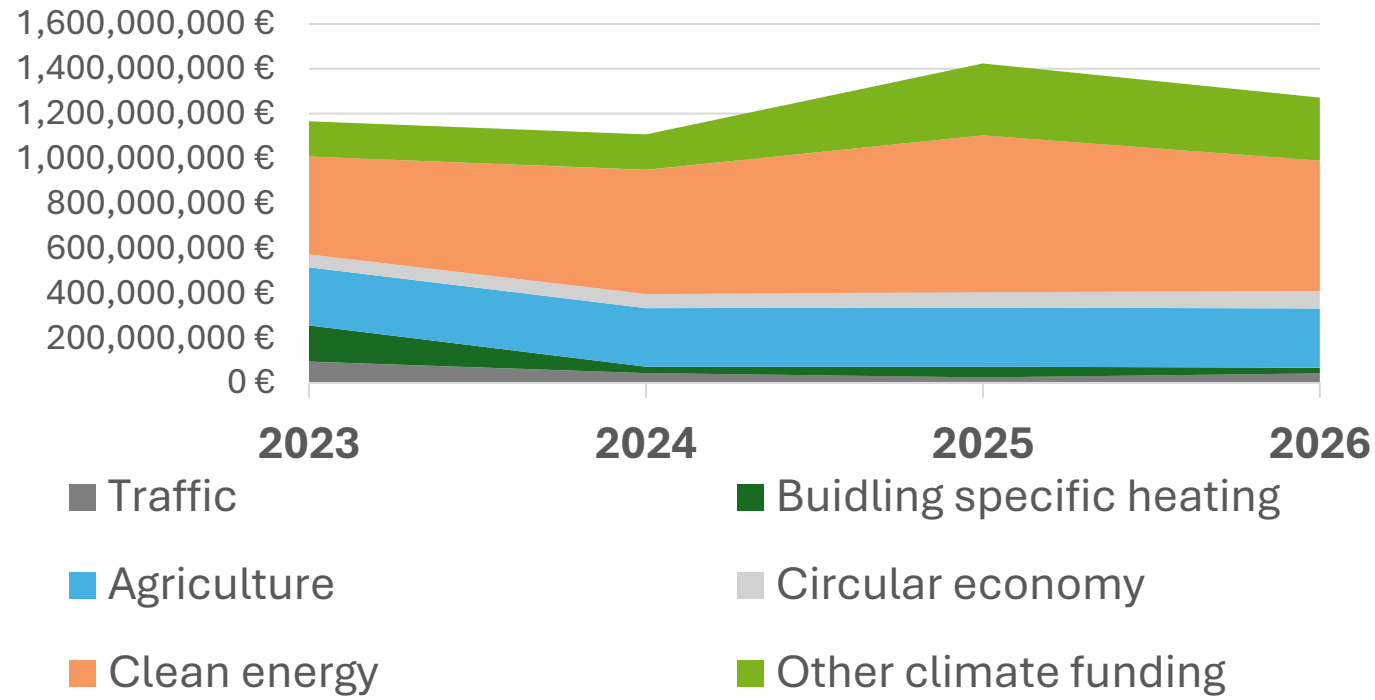
- **Mapping of public climate finance for the first time**
  - Government budget
  - Publicly owned companies financing for green transition and investments
- **Identifying and analysing financing gaps**
  - Discussions with experts
  - Cost efficiency analysis of emission reduction measures: marginal abatement cost curve
  - Analysis: How much funding does a measure need to be fully implemented
- **Expert network on climate funding**
  - Consists of 75 members from ministries, public authorities, government-owned companies, private financiers, municipalities, and regional actors
  - Continuous dialogue about funding gaps, investment challenges and policy recommendations



Miia Berger, Finnish Ministry of the Environment

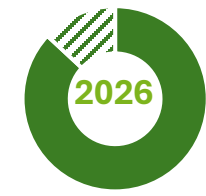


# Methods used to map financing gaps



## FUNDING GAPS

Implementation of the Medium-Term Climate Policy Plan (effort sharing sector) requires additional funding of **200 million euros** during 2026-2029. In addition, other measures in National Energy and Climate Strategy (ETS sector) require additional funding of **235 million euros**.



Miia Berger, Finnish Ministry of the Environment

# Mobilizing complementary resources

## Improving information on funding opportunities

- ACE project gathers information monthly on climate funding possibilities
- <https://www.motiva.fi/rahoitus/rahoituksen-tietopalvelu/> (in Finnish)

## Interaction with decision makers

- EU multiannual financial framework
- Government programme
- Climate plans
- Policy and finance recommendations

## Stronger focus in the future: Supporting the preparation of complementary projects

- Identifying climate project needs, gathering consortium, facilitating the development of at least 20 project concepts, identifying external funding

Miia Berger, Finnish Ministry of the Environment

# Improving more efficient public funding allocation and policy-mix planning through co-creation processes

## Climate impact evaluation tool for more efficient allocation of public funding

- Impact evaluation methodology and publicly available tool for evidence-backed public climate finance allocation is being developed with focus on ease of use and simplicity for generalist civil servants, regional financing authorities and funding applicants
- Specific emission reduction measures covering agriculture, traffic, construction and industry sectors are evaluated by leading experts in thematic workshops

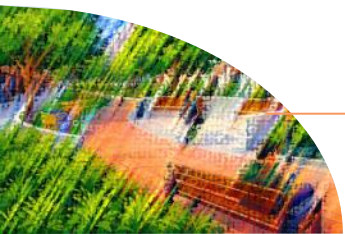
## Transition arenas for co-designing policy pathways

- Co-creation process with key stakeholders through interactive workshops and extensive consultations: identifying investment and adoption barriers, and measures required for overcoming them; formulated into policy and public funding mobilization recommendations

## Other stakeholder engagement and dissemination activities

- Events, seminars, interactive workshops, trainings etc. engaging with companies, industry organizations and other key stakeholders
- Communication and dissemination: ACE Case stories, project newsletters, media outreach activities, blogs and social media presence

Miia Berger, Finnish Ministry of the Environment



# Thank you! Contact us for more information and collaboration:

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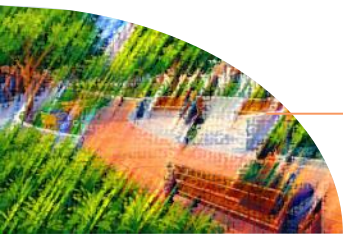
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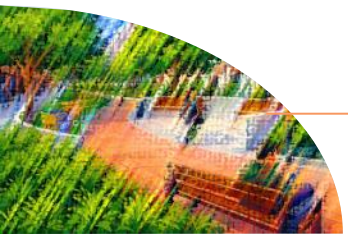
## More information about ACE LIFE project:

EU website: <https://webgate.ec.europa.eu/life/publicWebsite/project/LIFE22-IPC-FI-ACE-LIFE-101104613/accelerating-climate-efforts-and-low-carbon-investments-in-finland>

Project website: <https://hiilineutraalisuomi.syke.fi/en/projects/accelerating-climate-efforts-and-investments-ace-life/>



# EXTRA SLIDES FOR SHARING (with more details)



# Sector-specific examples: demonstration investments and funding/replication

## Sector-specific examples of ACE LIFE project interventions:

### Agriculture and food system:

- Greenhouse gas emissions from Finnish agriculture originate in the effort sharing sector primarily in **the digestive systems of production animals, manure, and the soil**
- Most of the emissions from the soil are from the land use sector, where the primary source of emissions is **drained peatland**
- As a solution, ACE is developing **value chains of plant-based proteins and paludiculture**, while promoting the use of **biomethane**

### Heavy vehicle transport and machinery:

- **Heavy vehicle transport and machinery** in Finland continue to be powered mainly by fossil fuels. Lack of funding and risk-sharing have limited the transition to alternatives.
- ACE promotes the **electrification of heavy vehicle transport and machinery** and the use of **biomethane and clean synthetic methane**
  - Demonstrations and development of charging and refuelling infrastructure
  - Piloting transport and machinery in the forest and food industries: e.g. piloting electric and biogas trucks in Lapland in arctic conditions

### Small and medium-sized industry:

- Finnish industrial SMEs use fossil fuels in, for example, the **food industry, the glass industry, metal recycling, laundries, and in district heating networks**.
- ACE promotes **smart electrification investments** to replace devices and machinery powered by fossil fuels

## Key points for replication and investment mobilization:

- *Plant protein, paludiculture and biomethane value chains have strong regional replication potential, but value chain structures are complicated and involve many stakeholders.*
- *Transition requires strengthened participation between e.g. farmers, regional authorities (key procurers of food such as schools), food/agricultural industry etc.*
- *Project activities focus heavily on increased engagement and reduction barriers across each value chain.*
- *Transition in heavy vehicle transport and machinery is investment-heavy and technical challenges still persist.*
- *Certain key stakeholders are crucial: public authorities, transport providers, infrastructure owners/providers and transportation procurers. Cross-stakeholder cooperation is only nascent, particularly in mobile machinery.*
- *Role of public grants for investment mobilization is key for private-sector risk-sharing for required fleet and infrastructure investments.*
- *SME electrification transition has occurred at an uneven pace. Industries are scattered and value chains are often complicated and extensive.*
- *Transition requires efforts focused on reducing differences in barriers between companies, regions and industries.*
- *Public grants and investments have a key role, particularly in relation to the most expensive and long-term device and machinery investments.*



# Policy background: Finland's climate and energy strategies

## Climate Act

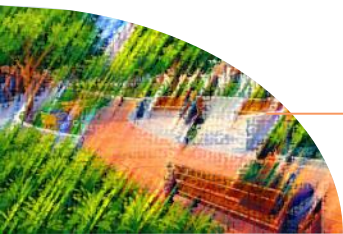
- New Climate Act entered into force in 2022. The new act lays down provisions on climate policy planning and the related monitoring and sets the national climate objectives. The act also imposes obligations on the authorities.

## Medium-Term Climate Plan

- The Medium-Term Climate Plan is based on the Climate Act. The plan is drawn up once during each electoral term.
- It includes an action programme to reduce emissions in the effort sharing sector.
- The Government approved the third Medium-Term Climate Plan in December 2025. The plan was prepared side by side with the National Energy and Climate Strategy.

## National Energy and Climate Strategy

- Energy policy also covers other matters that are not directly included in climate policy, such as the security of energy supply, the functioning of the energy market and the promotion of renewable energy sources and energy efficiency.
- It has become an established practice that each government draws up an energy and climate strategy.



# Methodological example: climate impact evaluation tool for use in regional public finance

## Collaboratively designed climate impact evaluation methodology and tool:

- Measures are evaluated against five main criteria: 1. sector GHG ER potential; 2. ER impact of measures financed; 3. scalability and replicability of ERs; 4. current adoption phase of the measures; 5. impact of indirect/enabling measures on ERs
- Sectors covered in phase 1: transport, energy system, built environment, machinery, agriculture (future additions: industry, circular economy/materials)
- The methodology is being co-developed (2025-2026) by Syke, regional Economic Development Centres, researchers and experts in sector-specific expert workshops
- Phase 1 of the tool to be finished by 2026; piloting of the tool will take place in Economic Development Centres' financing processes in 2027

## Key points for replication and investment mobilization:

- The tool provides critical evidence that can be used in directing funding towards measures with the most effective GHG emission reduction impacts
- Economic Development Centres are among the largest public financiers in Finland, with a strong regional presence and impact
- The work in ACE LIFE lays the groundwork for possible future use of an improved and upscaled version of the methodology/tool in public finance decision-making processes in other organizations in Finland and abroad

