



Main challenges to sustainable energy investment for local and regional authorities in Europe

PROSPECT+ Webinar
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Global greenhouse gas emissions and warming scenarios



- Each pathway comes with uncertainty, marked by the shading from low to high emissions under each scenario.
- Warming refers to the expected global temperature rise by 2100, relative to pre-industrial temperatures.

Annual global greenhouse gas emissions in gigatonnes of carbon dioxide-equivalents

150 Gt

100 Gt

50 Gt

Greenhouse gas emissions
up to the present

0

1990 2000 2010 2020 2030 2040 2050 2060 2070 2080 2090 2100

No climate policies

4.1 – 4.8 °C

→ expected emissions in a baseline scenario if countries had not implemented climate reduction policies.

Current policies

2.7 – 3.1 °C

→ emissions with current climate policies in place result in warming of 2.7 to 3.1°C by 2100.

Pledges & targets (2.4 °C)

→ emissions if all countries delivered on reduction pledges result in warming of 2.4°C by 2100.

2°C pathways

1.5°C pathways

The cost of Climate inaction

- Cost of failing to meet the Paris Climate Agreement goals¹:
 - If complying with NDCs submitted: economic shrinkage between \$127 trillion to \$616 trillion until 2100
 - If failing to implement NDCs: the loss plunges between \$150 trillion to \$790 trillion until 2100

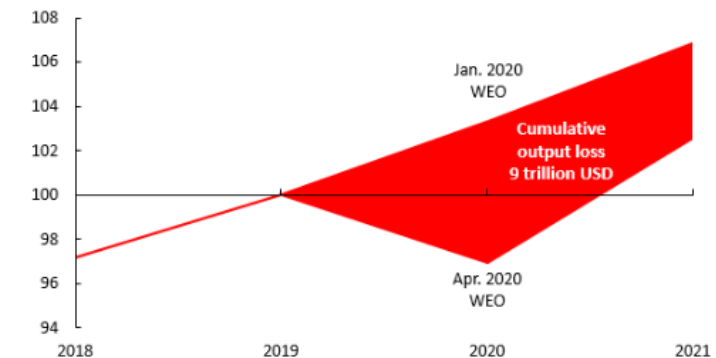
NB: global GDP in 2015 was approx. \$105 trillion

- Cumulative loss to global GDP due to COVID-19 global lockdown²: \$9 trillion

Output losses

The cumulative output loss over 2020 and 2021 from the pandemic crisis could be around 9 trillion dollars.

(global real GDP level, index)



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.

¹. [Wei, Y.M., Han, R., Wang, C. et al.](#) *Self-preservation strategy for approaching global warming targets in the post-Paris Agreement era.* *Nat Commun* 11, 1624 (2020).

². [IMF.](#) *The Great Lockdown: Worst Economic Downturn Since the Great Depression.* April 2020.

Investment could lead to significant positive cumulative net income

- Meeting the Paris Climate Agreement goals¹:
 - Requires investments between \$18 trillion and \$113 trillion
 - Of which more than 90% would come from G20 countries
 - Means for G20 countries to invest between 0.2 and 2 percent of their cumulated GDP every year in mitigation and adaptation actions

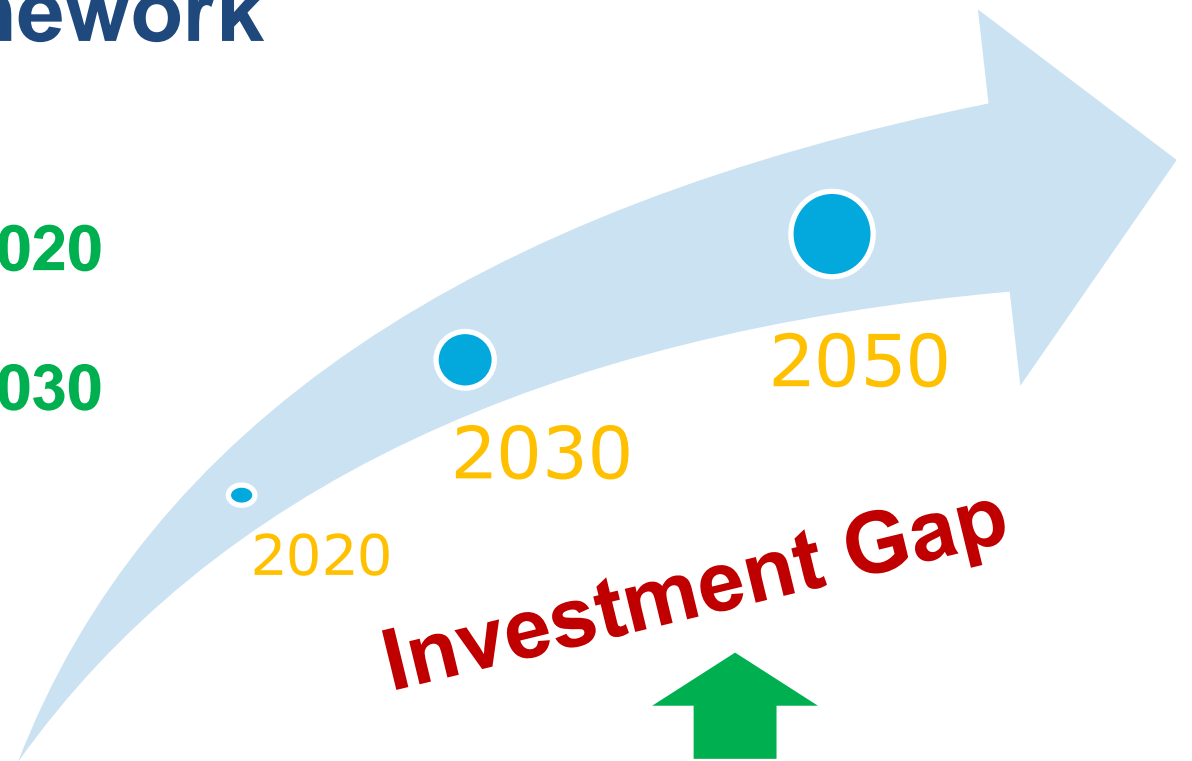
- **Investments are not losses!**
- Cumulative benefits would outweigh additional costs before 2100



¹. [Wei, Y.M., Han, R., Wang, C. et al.](#) Self-preservation strategy for approaching global warming targets in the post-Paris Agreement era. Nat Commun 11, 1624 (2020).

Climate and Energy Framework

- **Climate & Energy Framework 2020**
- **Climate & Energy Framework 2030**
(incl. “Long-term renovation strategies”)
- **Clean Planet by 2050:**
net-zero GHG emissions
- **European Green Deal:**
first climate-neutral continent
(incl. “Renovation Wave”)



Huge potential of
Cities/Municipalities
for sustainable energy investments

- *Pipeline building*
- *Aggregation*
- *Finance mobilisation*

EU funding landscape to support energy efficiency

For Direct Investments

- Recovery and Resilience Facility
- Cohesion Policy Funds (ERDF, ESF)
- Just Transition Mechanism - JTF

To leverage private investments

- InvestEU (Sustainable Infrastructure window and SMEs window)

For Research & Innovation

- Horizon Europe

To address Market Barriers

- LIFE – Clean Energy Transition & Climate Change Mitigation and Adaptation
- LIFE – Circular Economy & Quality of Life

For Technical Assistance and Advisory

- ELENA Facility
- Technical Support – Cohesion Policy

CINEA

Key contribution to European Green Deal



- Supporting **European Green Deal** - the roadmap for making the EU's economy sustainable and decarbonised by 2050
- Boosting **efficient use of resources** by moving to a **clean circular economy**, restore **biodiversity**, cut **pollution**, and achieve **climate neutrality by 2050**
- Key tool to **exploit huge potential of cities and municipalities**
- **Bridge gap** between local energy/climate strategies and sustainable energy investments:
 - Significant **project pipeline** across Europe
 - **Standardisation / aggregation** of projects
 - **Trust of investors**

Bridging the gap



Local & regional long-term energy & climate strategies



ESCOs, EPC

One-stop-shops

ELENA – PDA
Technical Assistance

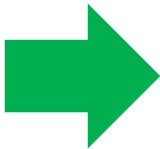
(or other)

Banks (incl. National Promotional Banks) and Investment Funds

Financing Platforms

EU and other public funds

- **Regular Calls**
Quick & easy application/evaluation
- **Country Experts & National City Networks**
Local support & promotion
- **City/municipality grants**
Efficient & sound contracting



Investment concept development
Actual investments

The other sides of the equation

Development

Implementation

Finance

- Technical support to clean energy transition plans and strategies in municipalities and regions (LIFE-2021-CET-LOCAL)



- Innovative financing schemes for sustainable energy investments (LIFE-2021-CET-INNOFIN)
- Integrated Home Renovation Services (LIFE-2021-CET-HOMERENO)
- Disruptive PDA – Technical Assistance to advance market boundaries for sustainable energy investments (LIFE-2021-CET-PDA)

- Call deadline: 12 January 2022 – 17:00 CET
- Budget 94,5 M€ - 18 call topics open
- Funding rate: 95% (indirect cost flat rate: 7% of eligible direct costs)
- Typical budget range 1-2 million euros
- Info and guidance

Thank you very much



[European Climate, Infrastructure and Environment Executive Agency](#)



[@CleanEnergy_EU](#), [@LIFEprogramme](#)



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