

PROJECT: EU4 Energy Transition Covenant of Mayors in the Western Balkans and Turkey

Prof. Dr. Tanay Sıdkı Uyar Short-term expert, CPVA

February 04, 2025

Implemented by









The Difference between Climate Change Mitigation and Adaptation Monitoring SECAP Implementation Climate Action through Data-Driven Monitoring and Learning EU Mission: Climate Neutral and Smart Cities

Prof. Dr. Tanay Sıdkı Uyar Renewable Energy Association EUROSOLAR Turkey President Istanbul Beykent University Faculty Member tanayuyar@beykent.edu.tr https://www.irenec.org/

MLGP4Climate: SECAP Masterclass 2025

Fifth Session

February 4, 2025 11:00 -12:30



Definition



Climate Change Mitigation: Actions to reduce or avoid the emission of greenhouse gases into the atmosphere to prevent global warming.

Climate Change Adaptation: Adjustments to natural or human systems in response to actual or anticipated climate impacts that mitigate harm or capitalize on beneficial opportunities.







Mitigation: Aims to address the causes of climate change by reducing greenhouse gas emissions and improving sinks.

Adaptation: aims to manage the impacts of climate change on various systems.







Mitigation: As climate change is a global phenomenon affected by the cumulative effect of greenhouse gases, the focus is on global efforts.

Adaptation: Usually focused at the local for regional level and tailored to the specific impacts experienced or expected in that region.





Time Frame

Mitigation: Long-term strategy with benefits over decades or even centuries.

Adaptation: Can be immediate or short-term to address current and anticipated needs.



Strategies



Mitigation: Includes switching to renewable energy, improving energy efficiency, reforestation and the development of new technologies such as CCUS.

Adaptation: This includes building flood protection, climate-resilient infrastructure, changing agricultural practices and improving water management.





Sector Participation

Mitigation: Requires the engagement of sectors directly affected by fossil fuel use and land use changes.

Adaptation: Includes sectors such as water health and urban planning to ensure resilience to climate impacts.





Dependence on Science and Technology

Mitigation: depends on technological advances to reduce emissions and improve energy efficiency.

Adaptation: greater reliance on local knowledge and engineering solutions appropriate to specific climatic threats.



Economic Impacts



Mitigation: Involves upfront costs for longterm gain, disrupts existing economic structures but provides opportunities for green growth.

Adaptation: Requires investment to replace existing infrastructure; this can be costly, but is crucial to avoid future expenditure due to unmanaged impacts.



Policy Integration



Mitigation: Integrated at the international level through agreements such as the Paris Agreement and national policies supporting these goals.

Alignment: Policies that are integrated into local government, requiring alignment with national strategies, which may differ across countries.



Result Measurement



Mitigation: Success is measured by reducing greenhouse gas concentrations in the atmosphere and stabilizing temperature.

Adaptation: Success is measured by reduced vulnerability and increased resilience of communities to climate impacts





Monitoring SECAP implementation Why is monitoring important?

Establishing a monitoring process that allows you to measure progress towards the targets set in your Sustainable Energy and Climate Action Plan (SECAP) is an important part of the Covenant of Mayors commitments.

It allows you to track the impact of the actions in your plan and compare projected and actual impacts in terms of energy savings, renewable energy generation, CO2 emission reductions and efforts to increase resilience to the impacts of climate change.



Funded How is the monitoring process conducted?



The monitoring process should be defined when preparing your action plan and can be further developed as an ongoing process. Here are some elements to consider when ensuring effective monitoring.

Tips for a successful monitoring process

- Appoint a person to coordinate the process and, if deemed necessary, a team or committee to meet periodically.
- Identify the data to be collected and consistent methods for data collection.
- Identify data sources, including departments and external stakeholders, and provide data,
- Set the monitoring frequency.
- Ensure that the data collected is reliable and comparable over time.
- Define monitoring indicators and set specific benchmarks to compare their performance.
- Define a communication plan to communicate the results to policy makers and other stakeholders and tailor the information to address each target audience.
- Ensuring the link between the results of the monitoring report and the municipal budget planning cycles, so that any adjustments can be included in your action plan if necessary.





Climate Action through Data-Driven Monitoring and Learning

Enabling cities to overcome challenges in data collection, analysis and insight generation, enabling continuous improvement and strategic learning in climate change efforts.

The Monitoring and Learning Pathway enables cities to effectively collect, analyze and use data to optimize climate actions.







Strong monitoring frameworks:

Your city needs effective monitoring frameworks, innovative data collection and visualization methods to track progress, results and impacts, enabling strategic learning for the climate transition.

Development of data analysis skills:

Your city is actively addressing resource constraints, developing effective tools, establishing coherent monitoring frameworks and increasing stakeholder engagement in decision-making/

Capacity building:

Tools and resources to strengthen the knowledge and capacity of your city's government and stakeholders, facilitating effective monitoring and evaluation of climate neutrality progress.





EU Mission: Climate Neutral and Smart Cities

The importance of climate neutral and smart cities

Cities play a crucial role in achieving climate neutrality by 2050, the target of the European Green Deal. They cover only 4% of EU territory but are home to 75% of EU citizens. Cities also consume more than 65% of the world's energy and account for more than 70% of global CO2 emissions.

As climate change mitigation depends heavily on urban action, we need to support cities to accelerate their green and digital transformation. European cities in particular can contribute significantly to the Green Deal goal of reducing emissions by 55% by 2030 and, more practically, providing their citizens with cleaner air, safer transport and less congestion and noise.





Mission Objectives

The Cities Mission will involve local authorities, citizens, businesses, investors, but also regional and national authorities.

- 1. Create 100 climate neutral and smart cities by 2030
- 2. By 2050, ensure that all European cities follow the same path, acting as centers of experimentation and innovation

As envisioned in the implementation plan, the Cities Mission adopts a cross-sectoral and demand-driven approach, creating synergies between existing initiatives and basing its activities on the real needs of cities.





Mitigating climate change: reducing emissions

The European Green Deal sets out the EU's overall roadmap for achieving climate neutrality by 2050, tackling the threat of climate change while growing economically and protecting people's wellbeing. With the European Climate Law, the EU has made climate neutrality by 2050 a legally binding goal, set an interim target of a 55% net reduction in emissions by 2030 and is working to set a 2040 target. The Fit for 55 proposal aims to align EU legislation with the 2030 target.

The impacts of the 2022 gas and energy security crisis have highlighted the importance of a faster transition to a clean and secure EU energy system.





Under the broader umbrella of the European Green Deal, Europe's 2030 policy goals include:

- Reduce net greenhouse gas emissions by at least 55% below 1990 levels by 2030;
- Improving the share of renewable energy use;
- Increasing energy efficiency;
- Identify a more ambitious and cost-effective pathway to achieve climate neutrality by 2050;
- Promote green job creation and maintain the EU's track record of reducing greenhouse/gas/ emissions while growing the economy;
- Providing more opportunities to refuel or refuel vehicles with alternative fuels and providing alternative power supply for ships and airplanes;
- Encourage international partners to increase their ambition to limit the global temperature rise to 1.5°C and avoid the most severe consequences of climate change;
- Introducing a waste hierarchy for proper waste management including prevention, reuse, recycling, recovery and disposal.







EU4ETTR PROJECT SOCIAL MEDIA ACCOUNTS



EU4 Energy Transition: Covenant of Mayors in Western Balkans and Turkey



EU 4 Energy Transition TR



EU4ETTR Project



EU4EnergyTransitionTR (EU4ETTR)