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Project: EU4 Energy Transition: Covenant of Mayors in the Western Balkans and Türkiye

Addressing Climate Change through Long- term Strategies and Immediate Actions

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Introduction

- Turkish municipalities have taken significant steps toward addressing climate change by developing long-term climate change and climate adaptation strategies, known as SECAP (Sustainable Energy and Climate Action Plans)
- Strategies provide clear directions and results to be achieved by 2050, emphasizing the importance of sustainable development and environmental resilience



Infrastructural demands



Life quality



Climate change
mitigation & adaptation



Energy security



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Short-Term Action Plans (2030)

Now is the time to focus on short-term (by 2030 or by 2035) plans for implementing specific measures

- Actionable Steps: Short-term plans should translate the broader goals of SECAP into actionable steps
- Timely Progress: Ensure timely progress and demonstrate immediate benefits to communities





Example of short – term action plan

SECAP objective – The municipality will meet 100% electricity needs using alternative energy sources

Annual electricity consumption for Municipal needs: 1,000,000 kWh

Action plan to achieve the objectives:

To install 0,75 MW Solar PV. Average Annual Production 1,000,000 kWh (since 1 kW produces 1,400 kWh)

Cost of Installing 0,75 MW Solar PV: € 617,000 (1 MW on average €823,000 – based on example in Istanbul municipality)

Approx. 4,300 m² are needed to install 0.75 MW of solar PV panels:

- on the roofs of municipal buildings – (100 buildings X 350m² = 3,500 m²) *Aim to complete installations on 20 buildings by the end of each year*
- development of new parking lots with solar PV – approx. 700 m² Begin installations on 10 car parks

Other – 300 m²

Considering the municipality's capacity to manage project implementation and the contractors' capabilities, the plan is to achieve the goals within 5 years (allocating € 123.400 each year)

Year	Investment	Installment MW	Electricity production (kWh)
1	123 400	0,15	210 000
2	123 400	0,15	420 000
3	123 400	0,15	630 000
4	123 400	0,15	840 000
5	123 400	0,15	1 050 000

Example of Ukmerge Municipality in Lithuania



Approximately 3.6 million kWh of electricity is produced per year, which constitutes about 80% of the energy needed for all municipal institutions. In total, green electricity is supplied to 295 facilities, including a hospital, all municipal schools, kindergartens, cultural and sports institutions, municipal buildings, and streetlights

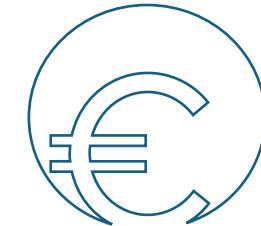


Financial Challenges

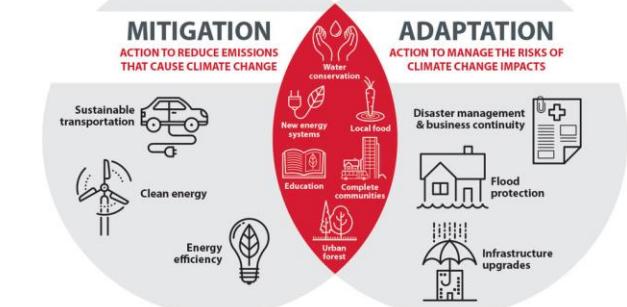
Financing the implementation of measures is a significant challenge for municipalities

- **Current Efforts:** Many municipalities invest time in participating in Interreg, Horizon or similar projects
- **Limitation:** These financial instruments rarely finance the implementation of solid measures

Municipalities should look for alternative sources of financing to achieve wider SECAP's long-term objectives



Building Climate Resilience



Funding opportunities

Development Finance Institutions (DFIs), play a crucial role in providing financial support for economic development projects

Here are some examples:

- **International Finance Corporation (IFC):**

Part of the World Bank Group, the IFC provides investment and advisory services to encourage private sector development in developing countries.

- **British International Investment (BII):**

Formerly CDC Group, BII invests in private sector businesses, banks, and projects in less economically developed countries to promote positive economic, social, and environmental change.

- **European Development Finance Institutions (EDFI):**

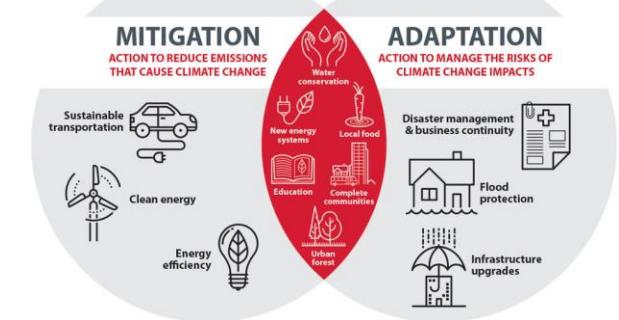
EDFI represents 15 bilateral DFIs from Europe, promoting joint interests and driving innovation in industry standards.

- **Norfund:** Norway's development finance institution, Norfund, invests in businesses in developing countries to create jobs and improve living conditions.
FMO:

The Dutch development bank, FMO, provides financial support to private sector projects in developing countries to promote sustainable development.

These institutions often take on higher commercial risks than private sector investors

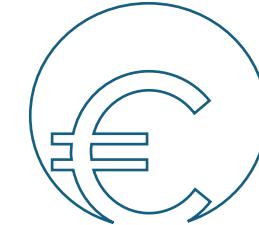
Building Climate Resilience



Funding opportunities

Energy Performance Contracting (EPC) Projects

Various municipalities in Europe have implemented EPC projects, where private companies finance and implement energy efficiency measures in public buildings, with the cost savings used to repay the investment – mainly for alternative energy sources and heating



Solar Power Projects in Rural Electrification

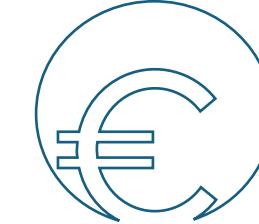
In several countries, PPPs have been used to develop solar power projects for rural electrification, providing clean and reliable energy to remote areas

Build-Operate-Transfer (BOT) Projects: BOT projects involve private companies designing, building, and operating infrastructure projects (such as renewable energy plants) for a specified period before transferring ownership to the public sector





Funding opportunities



Local Government Loans and Grants

Municipalities can apply for loans and grants from local government bodies or national government programs aimed at promoting sustainable development and climate action

Green Bonds

Issuing green bonds can raise capital specifically for financing environmentally friendly projects, including those related to renewable energy and climate action

Combine projects with other municipalities and jointly apply to financial institutions. Larger-scale projects may be eligible for more attractive conditions

Create leverage funds together with other municipalities.

By investing in a leverage fund and creating a guarantee fund, Municipalities can attract 5-6 times greater financial resources into the fund, which can be directed towards the implementation of SECAP measures (*Lithuanian VIPA experience*)

Strategic Assistance and Evaluation

Previously we provided assistance to Municipalities in preparing SECAP strategic documents

Current Phase:

To assess the experience of municipalities in other countries in implementing and financing SECAP measures

Financial Mechanisms:

Assess potential and accessible financial mechanisms for Turkish municipalities

Propose alternative funding solutions for implementing SECAP measures



Assessing Readiness and Financial Needs

In order to find out the readiness of Türkiye municipalities and the need for funds we prepared a short questionnaire:

- Readiness Assessment: Evaluate current level of readiness to implement SECAP measures
- Types of Measures: Assess planned measures (e.g., solar PV systems, waste management, infrastructure, etc.)
- Financial Needs: Determine financial resources required in the near term and longer term
- develop a feasibility study, and provide funding proposals



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Thank you for your attention!

