

TAKING
COOPERATION
FORWARD

Transnational training Introducing Energy and Climate Planning

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Regional
Energy
Agency **North**

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Energy planning

- Process of developing long-range policies to help guide the future of a local, national, regional or even the global energy system.
- Energy planning is particularly appropriate for **communities** who want to develop their own energy security, while employing best available practice in their planning processes.



Energy planning

- MITIGATION – actions or measures that helps to reduce energy consumption and human-generated greenhouse gas emissions
- Cities must be leaders in reducing greenhouse gases!!!



Climate planning

- There is no „**one-size fits all**” approach
- **ADAPTATION** – process through which communities prepare to cope with an uncertain future climate
- It does not mean that negative impacts of climate change will be completely avoided, only that they will be less severe than if no planning had occurred



Energy and climate planning

Energy and climate planning is a cross sectoral task and involves a variety of different professional capabilities:

- **Energy sector**
- **Environmental issues**
- **City building and urban planners**
- **Architecture**
- **Logistics**

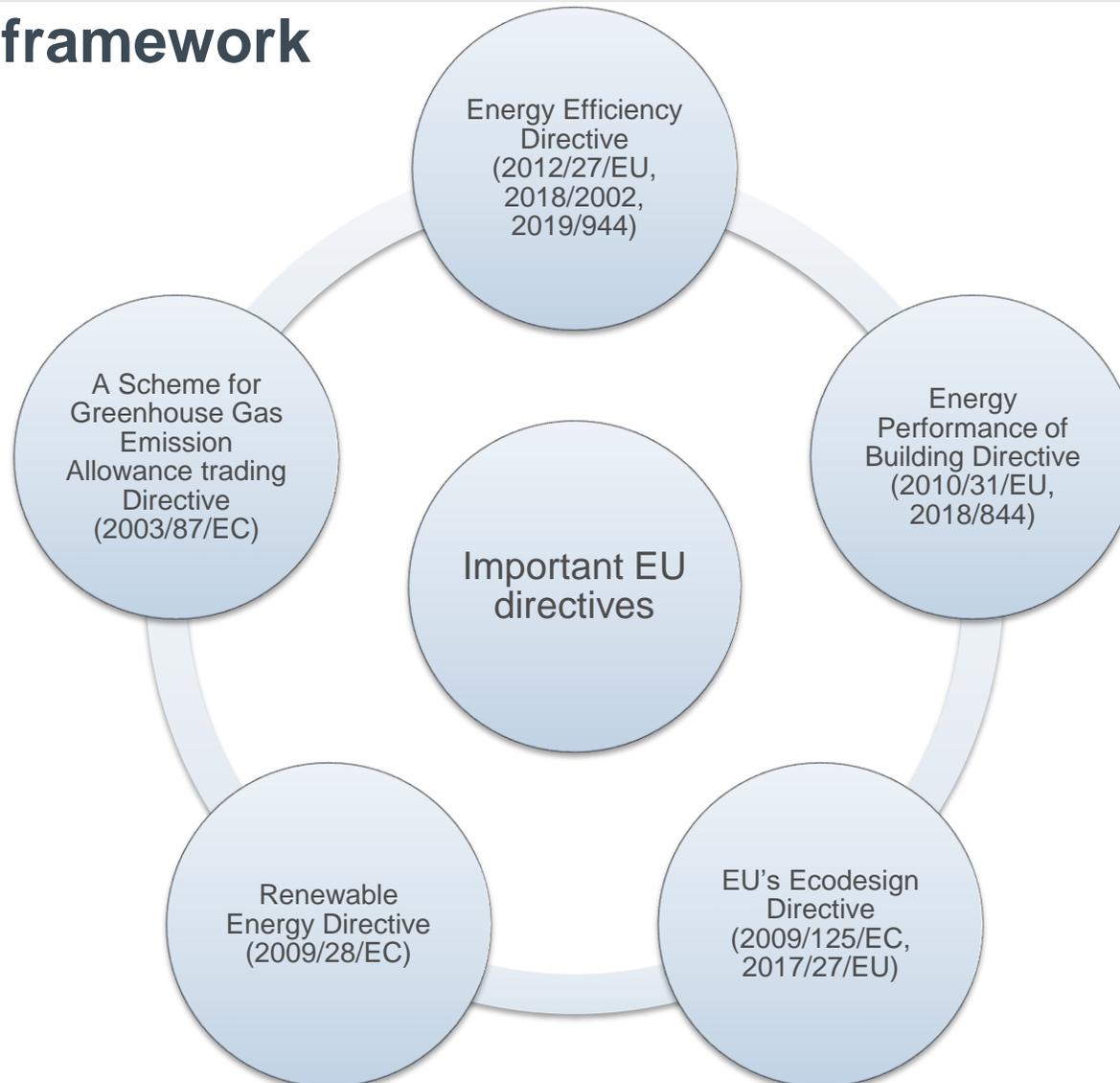
Energy and climate planning comprises many elements:

- **Planning**
- **Coordination**
- **Analyzing**
- **Process management**
- **Consulting**
- **Law issues**
- **Education**
- **Engineering**



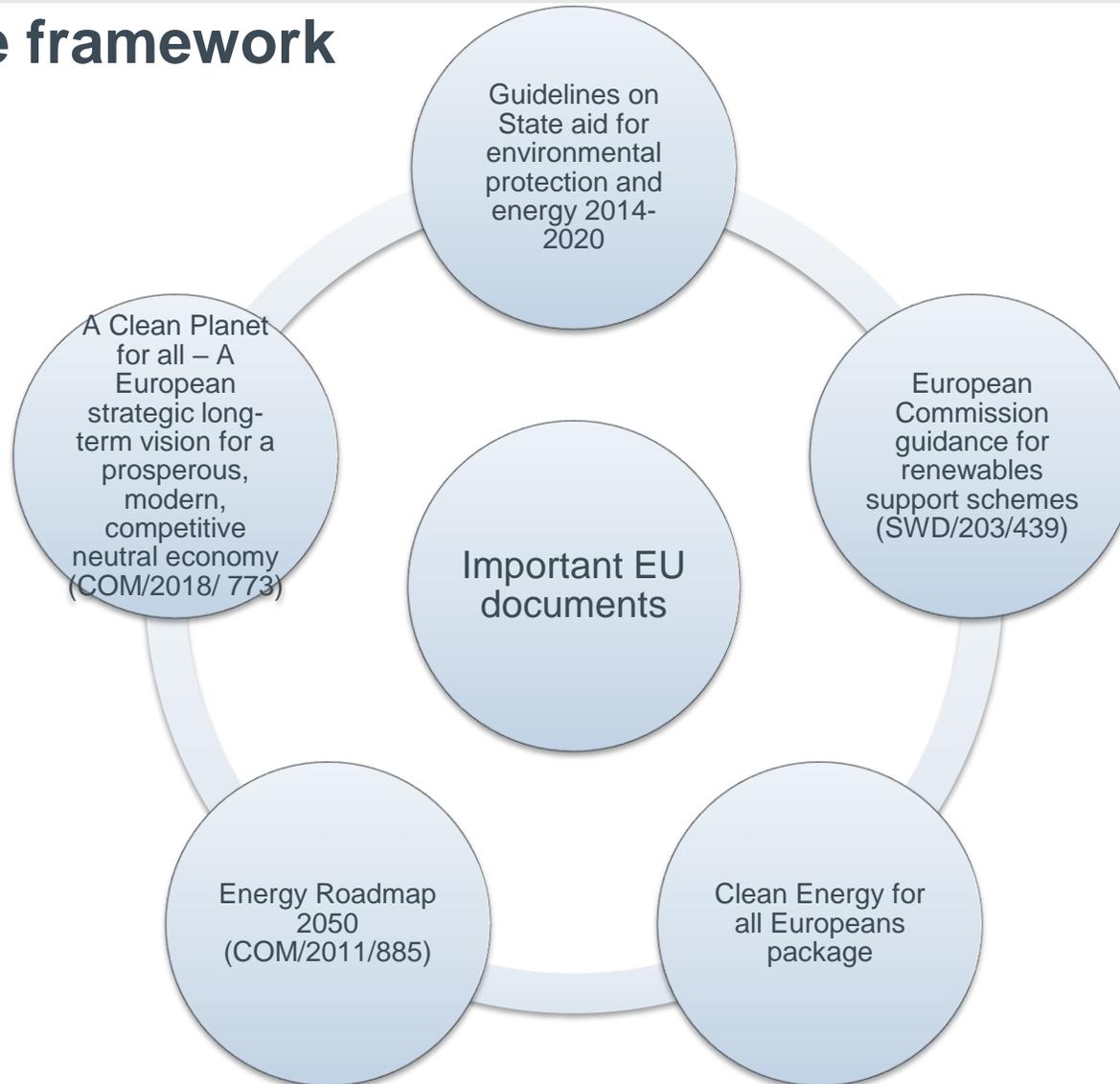
Energy and climate planning

EU legislative framework



Energy and climate planning

EU legislative framework



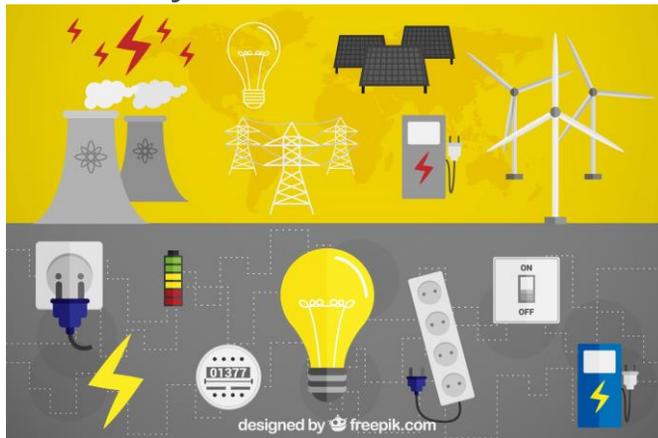
Energy Efficiency Directive (ammendment 2018/2002)

EU countries are required to:

→ develop integrated **National Energy and Climate Plans (NECPs)** for the period **2021 to 2030**

→ submit a draft NECP by 31 December 2018 and be ready to submit the final plans by 31 December 2019 to the European Commission

→ report on the progress they make in implementing their NECPs, mostly on a biennial basis



NECPs should include the following elements:

1. Current situation

- a) Overview of the **national energy system and policy context** of the national plan across the five dimensions of the Energy Union
- b) Assessment of the situation in terms of current **energy and climate policies and measures**, including support schemes and fiscal systems for renewable energy and energy efficiency
- c) Overview of key issues of cross-border relevance including **opportunities and challenges for further regional cooperation and integration.**
- d) The **administrative structure** of implementing national energy and climate policies, including responsibilities of main administrative bodies and their interactions.

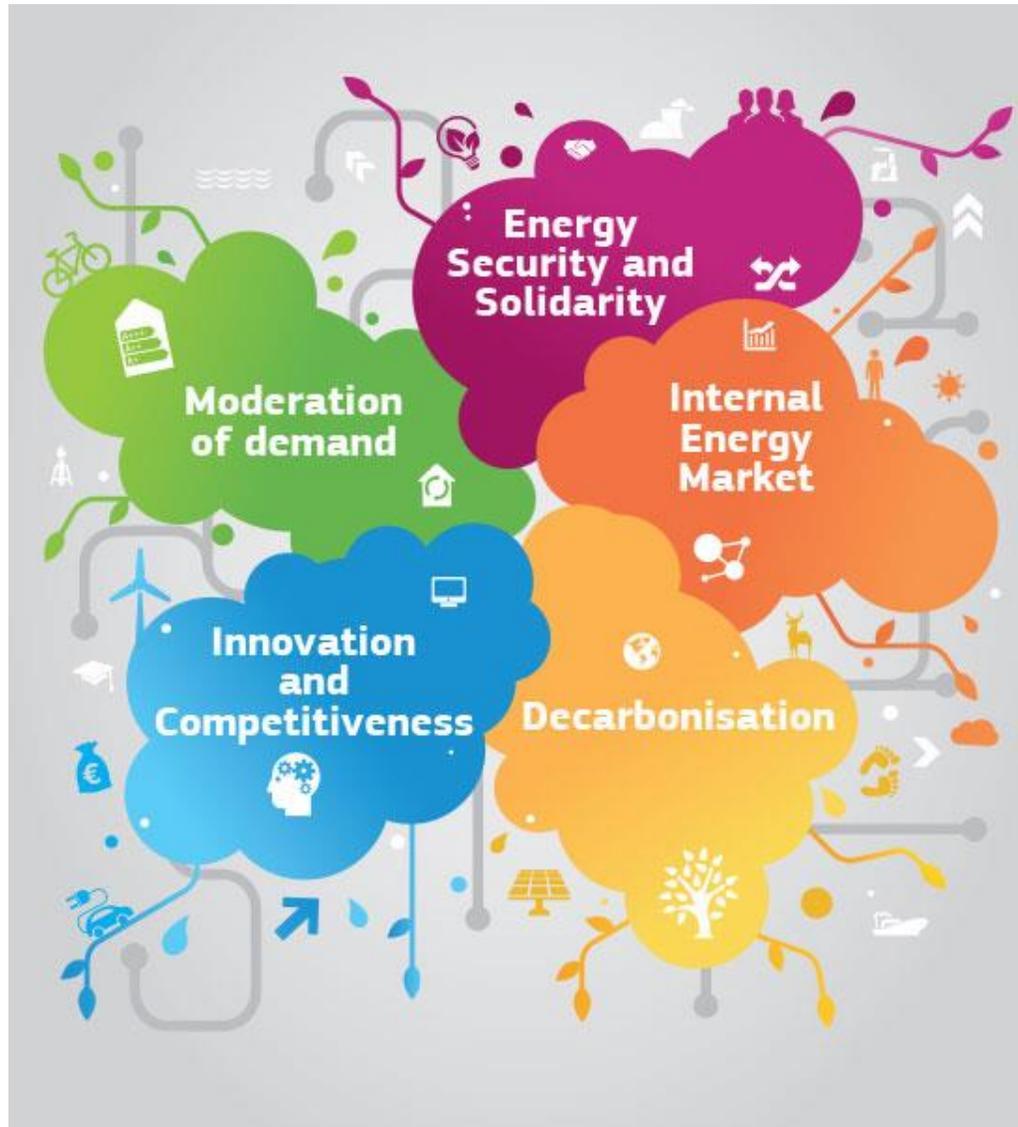


2. Objectives, policies and measures for five dimensions

- a) The national plans should define **objectives for each dimension**, in line with the five pillars of the Energy Union.
- b) The **interaction between the different dimensions** should be set out (e.g. the contribution of renewable energies and energy efficiency to greenhouse gas emission reduction, the infrastructure needs arising from a greater use of renewables etc.).
- b) For each objective, the plan should include a **description of the policies and measures** planned for meeting these objectives.



Five dimensions of the energy union



3. Integrated projections and indicators

- a) Projections for the period **until 2030 with 2050 perspective**
- b) The plan should set out at least two **scenarios**:
 - i. A **reference scenario** based on current trends and existing policies and measures at Energy Community and national level
 - ii. At least one policy scenario reflecting the implementation of envisaged national objectives by **additional policies and measures**



National planning process actors in Croatia

The main institutions responsible for energy policy in Croatia:

- Ministry of Physical Planning and Construction
- Ministry of Environmental Protection and Energy
- Ministry of the Sea, Transport and Infrastructure
- Center for Monitoring Business Activities in the Energy Sector and Investments
- Environmental Protection and Energy Efficiency Fund
- Agency for Transactions and Mediation in Immovable Properties
- Energy Institute Hrvoje Požar
- Croatian Energy Regulatory Agency

Institutions and organizations within various energy efficiency areas:

- HEP JSC
- HEP Heat Distribution
- HEP Distribution System Operator (HEP ODS)
- Croatian Transmission System Operator Ltd.
- INA JSC
- Croatian pipeline (JANAF)
- Faculty of Mechanical Engineering and Naval Architecture
- Society for Sustainable Development Design (DOOR)
- Croatia Green Building Council
- HEP ESCO Ltd.

- State Office for the Central Public Procurement
- Energy and Environmental Protection Institute (EKONERG)
- Faculty of Electrical Engineering and Computing (FER)
- UNDP
- The International Centre for Sustainable Development of Energy, Water and Environment Systems (SDEWES)
- Croatian Business Council for Sustainable Development
- Croatian Professional Association for Solar Energy
- Croatian Association of Energy Certificators

Regional energy agencies:

- Istrian Regional Energy Agency Ltd. (IRENA)
- North-west Croatia Regional Energy Agency (REGEA)
- Medjimurje Energy Agency Ltd. (MENEJA)
- Regional Energy Agency North (REA North)
- Regional Energy Agency Kvarner (REA Kvarner)

Energy cooperatives:

- BAN – UNION
- Green energy cooperative (ZEZ)
- Energy cooperative Otok Krk
- Energy cooperative Kaštela

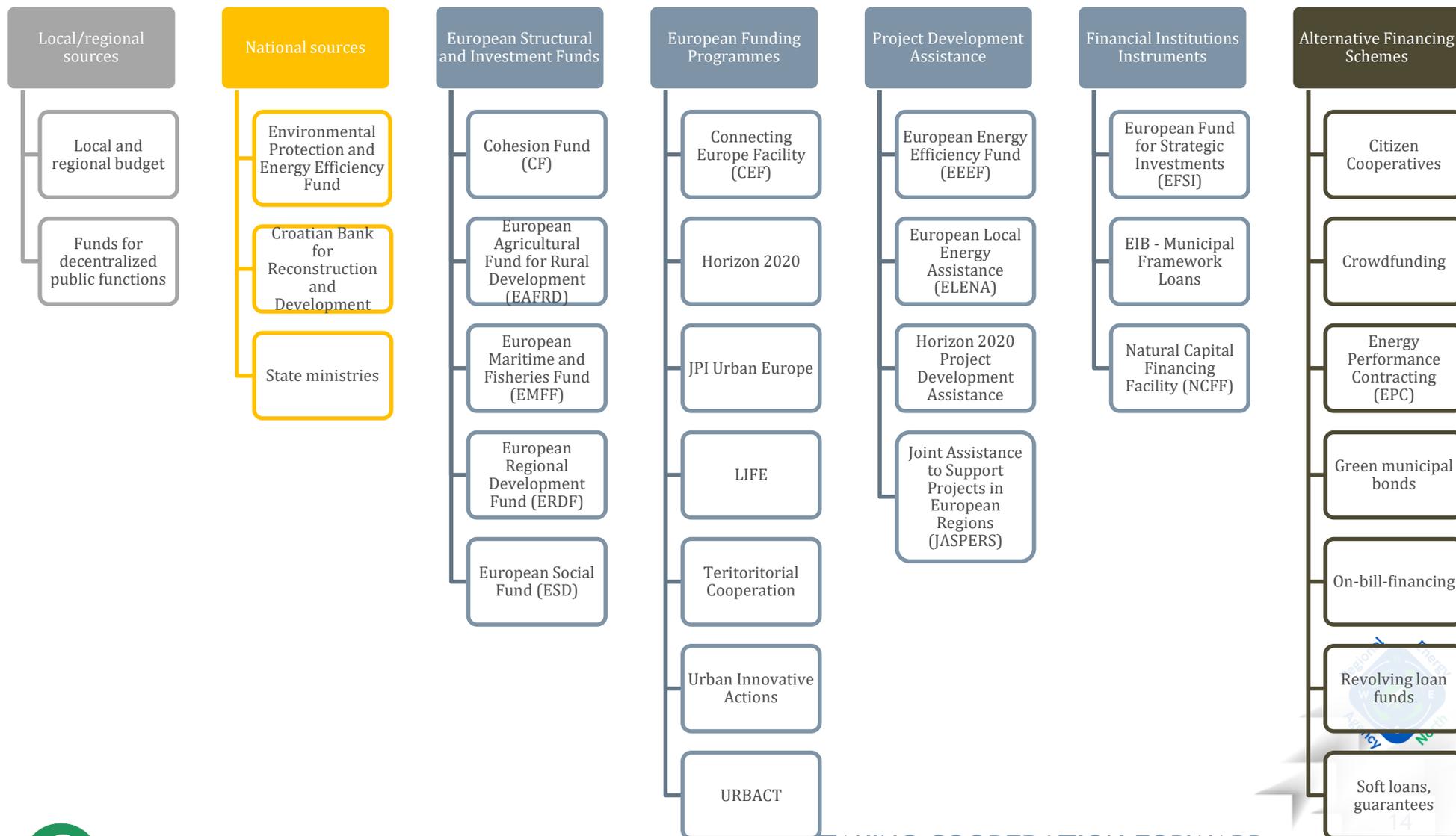
- Energy cooperative Lug
- Energy cooperative Sunčani Hvar
- Veteran cooperative Ka-Solar
- Energy cooperative SPES

ESCO companies:

- HEP ESCO Ltd.
- Rudan Ltd.
- REFLEX Ltd.
- Cras Ltd.
- Jedinstvo Krapina Ltd.
- Kamenmont Ltd.
- DUBOŠ GRADNJA Ltd.
- Sense ESCO
- WORK-ING Ltd. Varaždin
- SPACE Company
- ...



Financial opportunities in Croatia



- impossibility to collect energy consumption data (no historical data, „big data” etc.)
- lack of fundings (small local/regional budgets)
- lack of knowledge
- lack of interest
- lack of multi-level governance (communication between national, regional and local level)
- GDPR



Discussion points

- Who are usually the „data collectors” – energy agencies, city administrative departments,...
- Which are the main barriers in collecting data needed for energy planning?
- What is the role of regional energy agencies and how can they more efficiently support the adaptation to climate change?
- How can the data collection process be facilitated?



THANK YOU!

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