

# JASPERS Stakeholders Meeting

Preparing sustainable projects for the future  
with JASPERS support

9 - 10 November 2021

## SESSION 3

A greener, low carbon Europe - circular  
economy, water, risk management and  
energy sectors

# A greener, carbon-low Europe

JASPERS 2021 Stakeholder Meeting – Breakout Session 3.2

Water, Energy and Solid Waste / Circular Economy

Moderation Ralf Goldmann

# Agenda of this Breakout Session

Moderation Ralf Goldmann

- **Water:**

- Introduction to the water sector : Dr. Eckart Tronnier (Head of Water Advisory Division – JASPERS)
- Risk management - Dr. Raed Arafat (Secretary of State, Ministry of Interior – Romania)
- Q & A session

- **Energy:**

- Challenges in the energy sector over 2021-2027 MFF
- Q & A session

- **Solid Waste / Circular Economy:**

- Solid waste project pipelines from JASPERS upstream support
- Eligibility of integrated waste management plants in the new MFF
- Paving the way for circular economy projects  
by JASPERS senior experts Alina Oberdörfer and Maria Blanco Herbosa
- Q & A session

# Water and Risk management



- **Directive 2021/1058 - Policy objective 2**

- A greener, low-carbon transition towards a net zero carbon economy and resilient Europe by promoting ... climate change mitigation and adaptation, risk prevention and management, ...

- **Specific objectives**

- Promoting climate change adaptation and disaster risk prevention and resilience, taking into account eco-system approaches (*with intervention fields established by Directive 2021/1060*)
  - Floods and landslides, fires, storms and drought, earthquakes, technological accidents
- Promoting access to water and sustainable water management (*with intervention fields from 2021/1060*)
  - Provision of water for human consumption, water management and water resource conservation, wastewater collection and treatment

# Water management – good practice



- **Promoting access to water and sustainable water management**

- Water supply and wastewater treatment (*mainly compliance driven projects*)

- Croatia, Greece, Poland, Slovenia: Municipal projects (major and non-major scale)

- Bulgaria: Integrated multi-municipal projects (mainly non-major scale)

- Romania: Integrated regional multi-system projects (major scale)

- Water management (*multi-purpose projects*)

- Malta: Harmonize drinking water quality, change groundwater abstraction, polish water for irrigation, lower seawater intrusion, reduce energy for pumping, wastewater collection.

- Warsaw/Poland: Adapt water and wastewater systems to climate changes, water supply security, stormwater management and stronger flood resilience, wastewater collection

# Risk management – good practice

- **Climate change adaptation and disaster risk prevention and resilience**

- **Flood risk management:** Croatia, Hungary, Poland, Slovakia

- Flood protection scheme for the Karlovac-Sisak area (Croatia)
- Tisza Tur Retention Reservoir (Hungary)
- Flood-plan management of Tisza Valley (Hungary)
- Klodzka Dala flood risk management (Poland)
- Raciborz flood control (Poland)
- Adjustment of intervention capacities through active anti-flood measures (Slovakia)

- **Disaster risk management:** Romania

- Increased capacity for intervention in case of multi-risk disasters (non-major)
- Efficient response saves lives programme (non-major)
- Modernisation of 112 services (non-major)
- Vizunea 2020 – Enhancing disaster management capacity (Major)
- Peer reviewing the preparation of a National disaster risk management plan (Strategic)



# Dr. Raed Arafat

Secretary of State, Ministry of Interior, Romania

Insights gained from achieving EC grant approval for civil protection and disaster risk management projects

# **A greener, low carbon Europe – challenges in the energy sector over 2021-2027 MFF**

Marcin Idczak, Energy Efficiency and Energy Advisory

10/11/2021

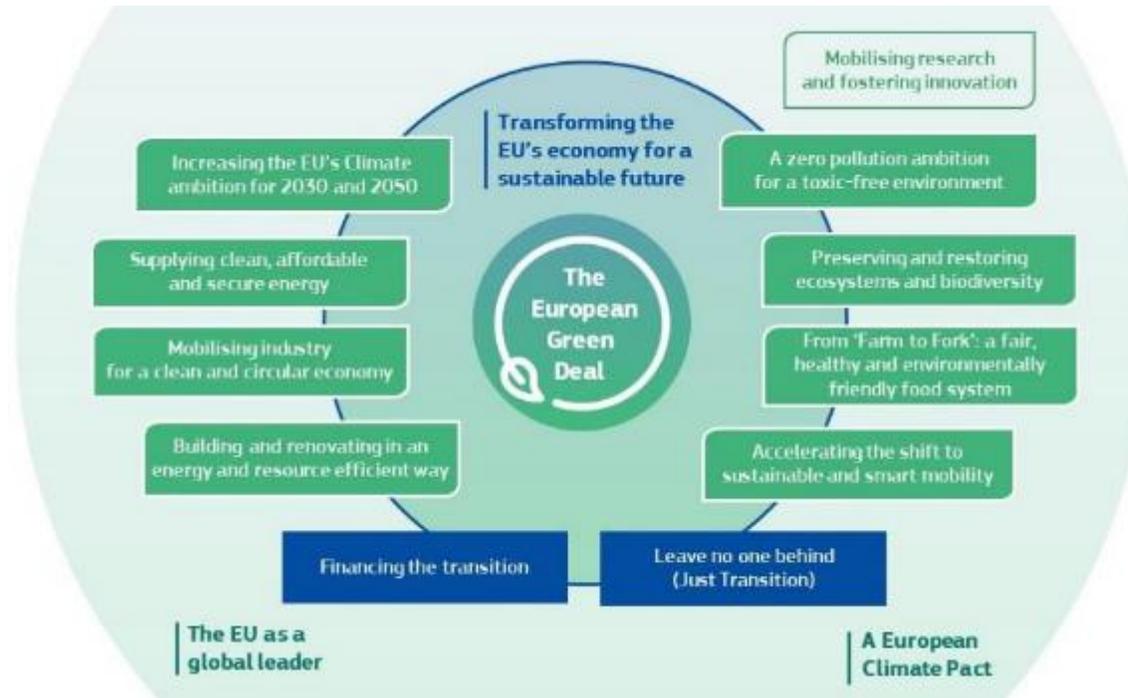
# 2021-2027 MFF – JASPERS Energy perspective

- No Major Projects
- No more fossil fuels
- New topics: hydrogen, storage, Just Transition Mechanism, Operations of Strategic Importance



# Main challenge – meeting climate target

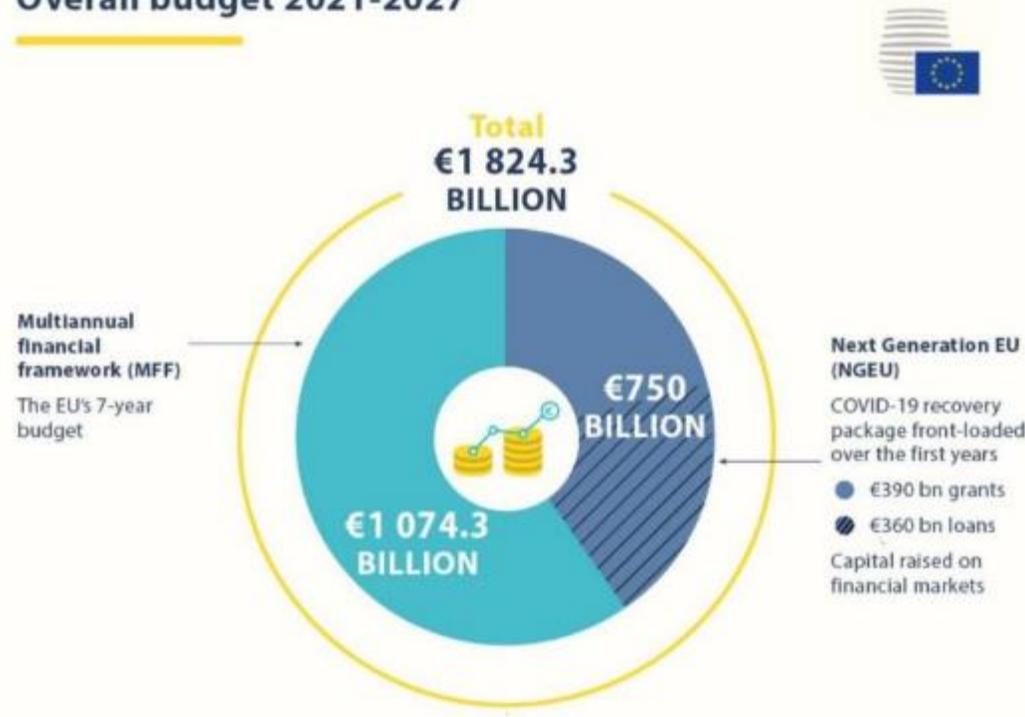
- Green Deal: 55% CO<sub>2</sub> reduction target by 2030,
  - RED: At least 32% (40%) share for renewable energy,
  - EED: At least 32.5% (39%) improvement in energy efficiency.
- The Commission estimates that in order to achieve the proposed 55% climate target by 2030, around **EUR 275 billion of additional investments are needed per year, the lion's share in energy efficiency.**



# Challenges with absorption

- One-third of 1.8 trillion EUR package will support Green Deal
- ERDF and CF amount to EUR 350 bn (30% of allocation to PO2)
- Key instruments: ESIF, Modernisation Fund, JTF, RRF, InvestEU

## Overall budget 2021-2027



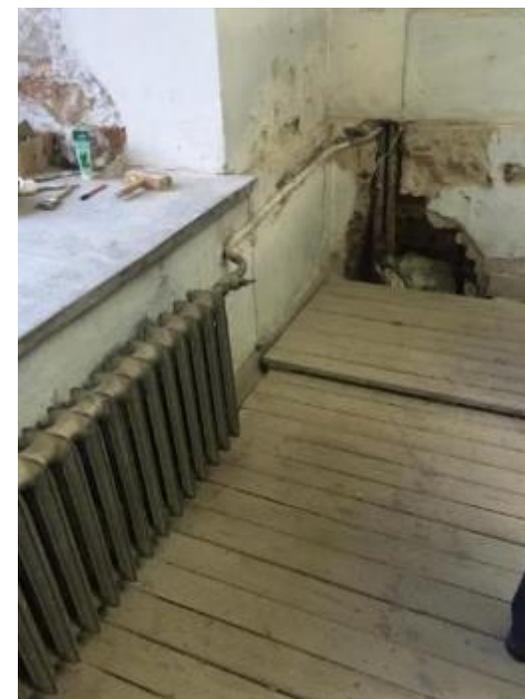
# Challenges in EE in buildings

- Implementation of the **Renovation Wave**:
  - double the annual energy renovation rate of buildings by 2030
  - foster deep energy renovations
  - 35 million building units renovated by 2030
  - EUR 90 bn in additional investments per year (the lion's share)



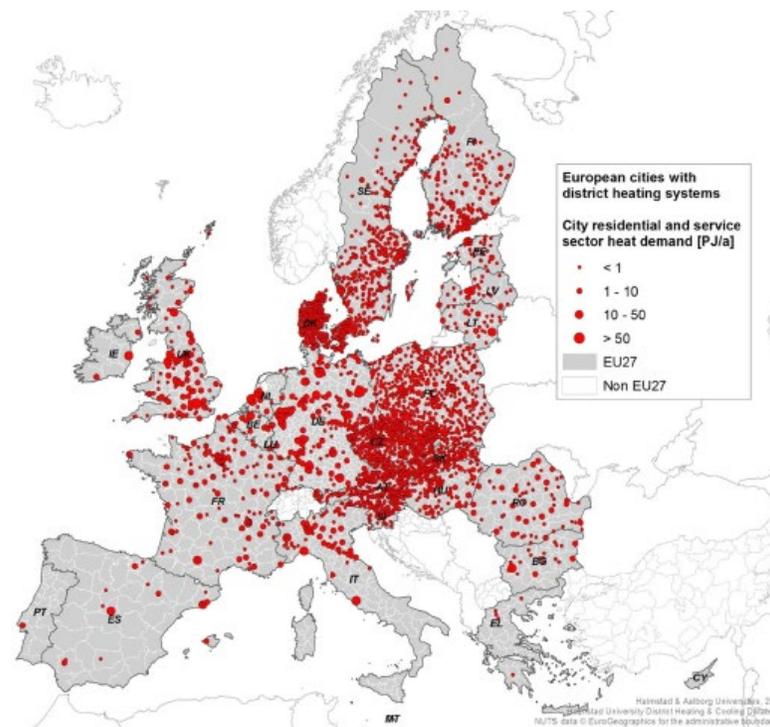
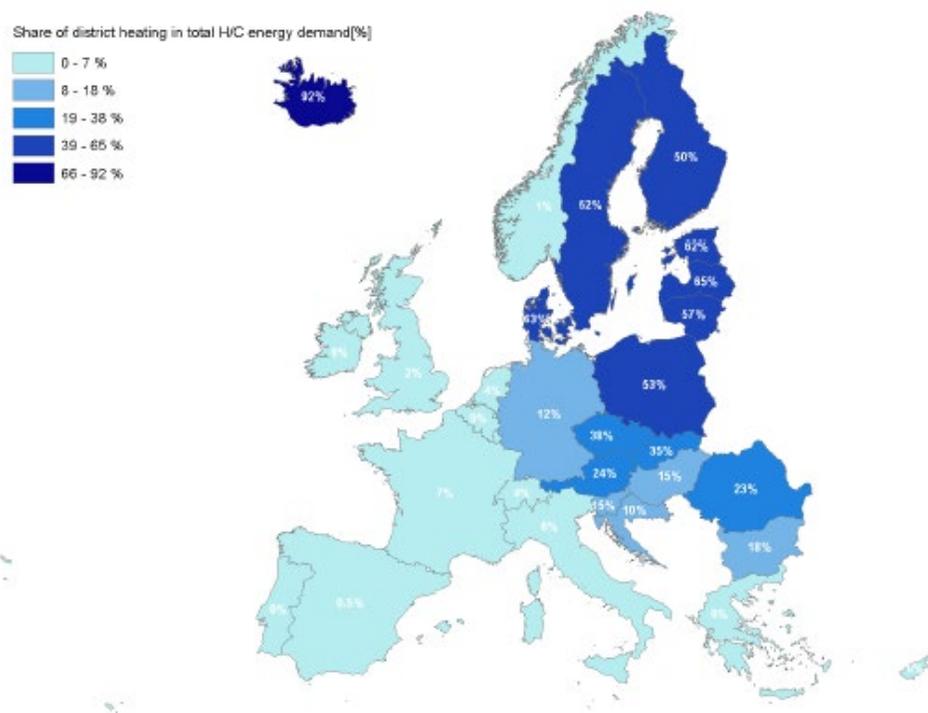
# Challenges in EE in buildings

- Designing and implementing EE schemes will be a challenge
- Role of TA is crucial
- JASPERS mentioned in the Renovation Wave Communication



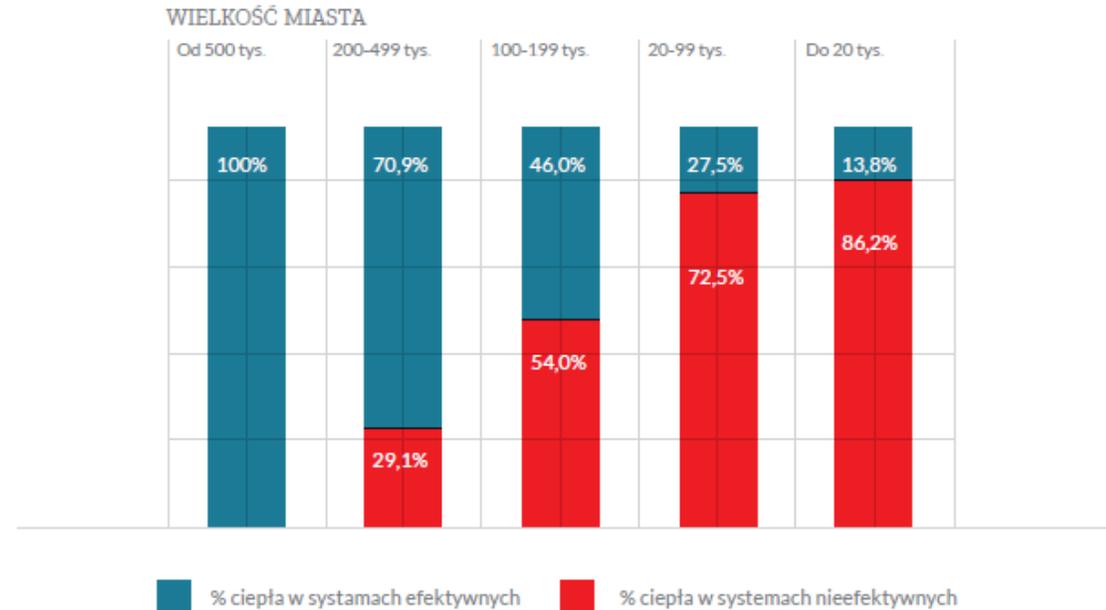
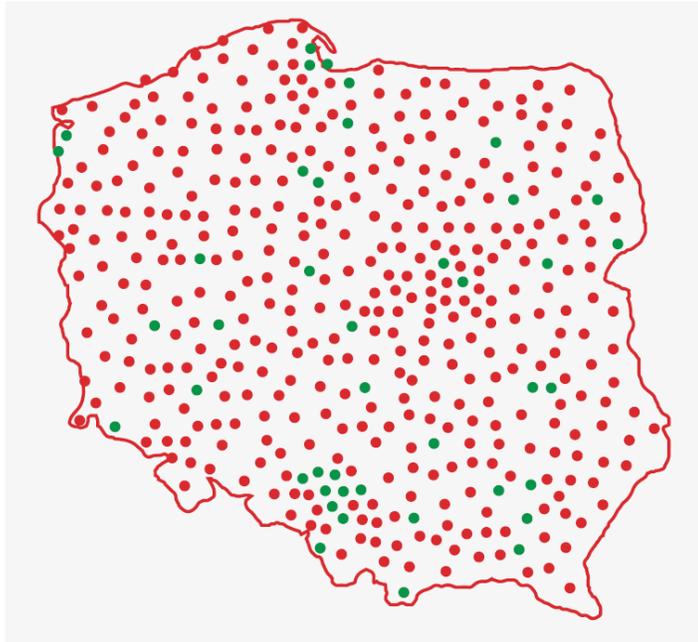
# Challenges in District Heating

- There are some 10,000 DH systems in the EU with 150,000 km of network and an installed capacity of some 247 GWth, serving 70 million citizens.
- The total energy supplied by DH amounts to 580 TWh.
- District heating provides 9% of heating in the residential sector, 10% in the service sector and 8% of industry's heat needs.



# Challenges in District Heating

- At EU level, the main fuel used in DH is natural gas (40%), followed by coal (29%), biomass (16%), RE waste (5%), non-RE waste (4%), fuel oil (3%), other fossil fuels (2%), electricity (1%) and other RE.
- The total GHG emissions from the DH sector may be estimated at around 160 MtCO<sub>2</sub>. This corresponds to approximately 5% of total GHG emissions associated with energy consumption in the EU.
- Example from Poland: some 80% of the DH systems does not comply with the efficient district heating system definition.
- New definition of efficient DH system from EED 2021.



# Challenges in other sub-sectors

- Renewables
- Hydrogen
- Smart grids and storage



# Wrap-up

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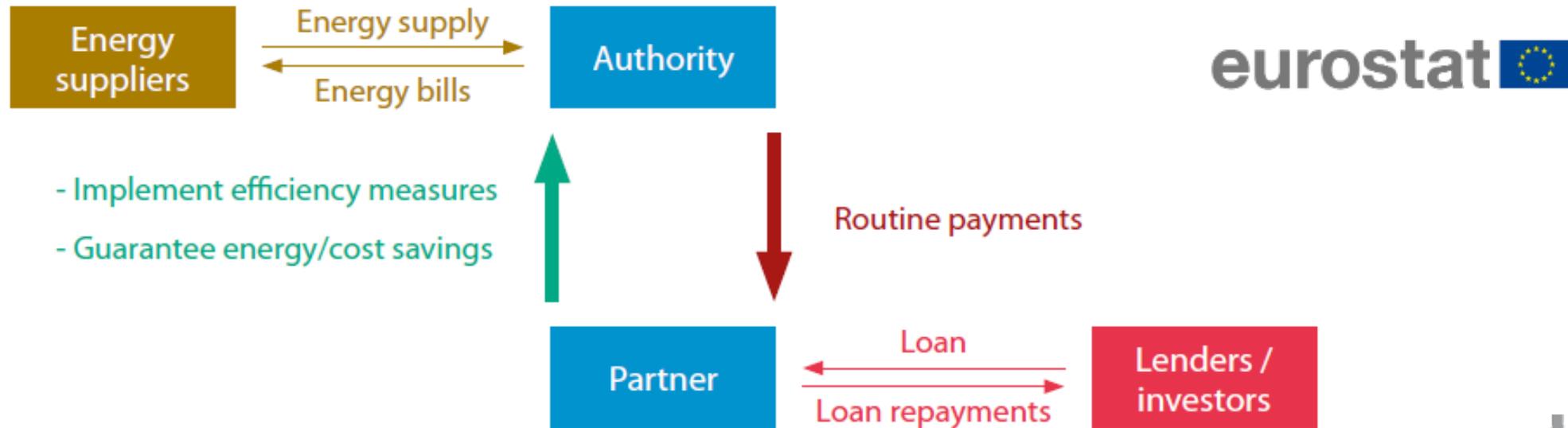
- Investments required for meeting climate target are substantial.
- There is plenty of funds available, from different sources.
- New priorities and initiatives emerge.
- JASPERS energy needs to **change focus** and adjust the support to the needs on the ground, notably by switching emphasis from **key energy infrastructure projects** to **smaller projects**, assisting them by means of horizontal support.

# Horizontal support: EE schemes

- Ministry of Regional Development and EU Funds
- OP Competitiveness and Cohesion 2014 – 2020, TO4:
  - 4b - Promoting energy efficiency and renewable energy use in enterprises
  - 4c - Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector
- Some EUR 530 m in EU funds available under TO4, including:
  - EUR 50 m in enterprises
  - EUR 270 m for EE in public buildings and housing
- Scope of JASPERS assistance:
  - State aid
  - Grant rates
  - Eligibility and selection criteria
  - Eligible measures
  - Procedures, applicants guidelines
  - Standard procurement documents

# Horizontal support: Energy Performance Contracting

- Slovenia: advice on choosing the optimal type of FI for supporting the implementation of EPC projects in the public sector and on combining grants and FI
- Poland: development of a model EPC project in the public sector
- Slovakia: support to development of a model EPC contract and the guidance document for local authorities
- Latvia: development of a model EPC contract for the public sector
- Lithuania: identification of barriers to the development of EPC sector



# Horizontal support: DH

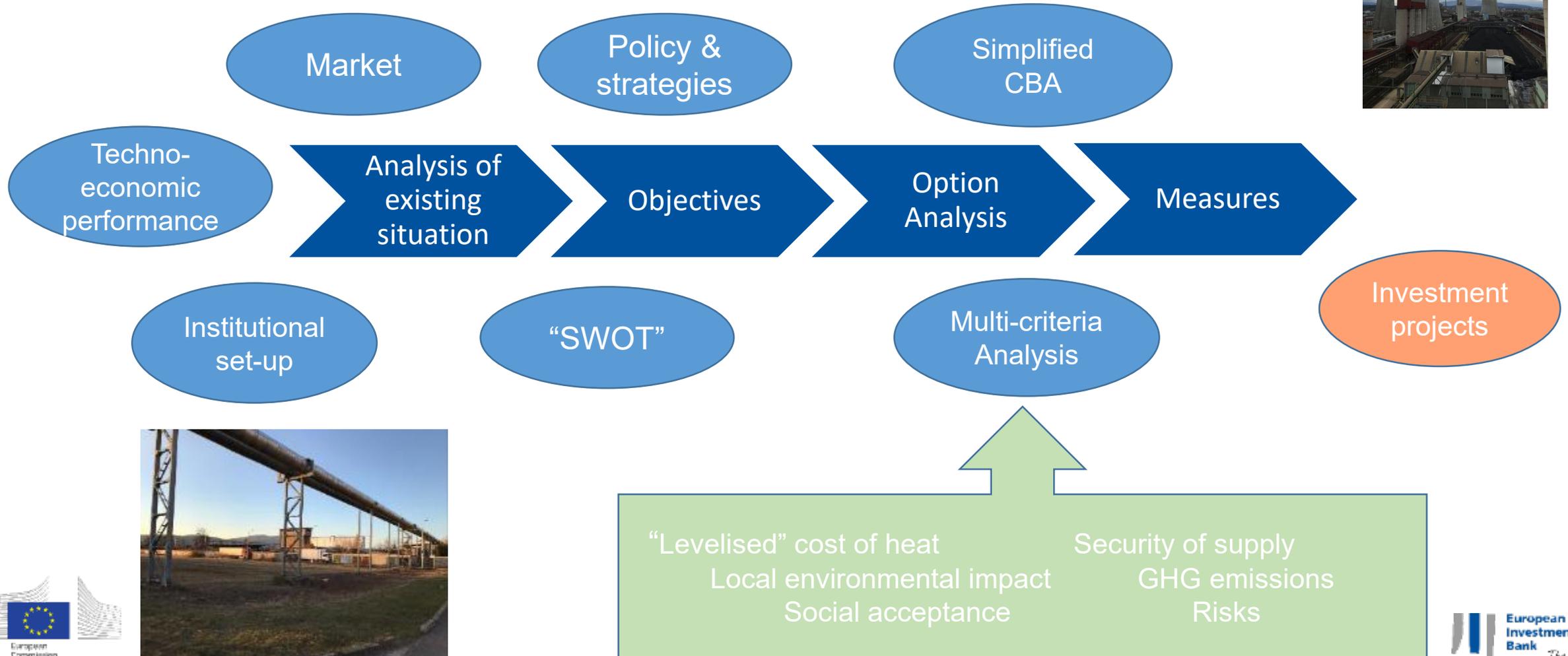
JASPERS support to DH decarbonisation projects in Slovakia:

- Technical / economic **assessment of existing situation**
- Developing comprehensive set of **heat supply alternatives**
- Estimation of **Levelised Cost of Heat (LCOH)** and (high-level) technical suitability for several alternative solutions
- **Advice to project promoters** during the development of the project concept
- **JASPERS independent opinion** on project alternatives to help national and local stakeholders in their decision-making process
- **Multi-criteria model** to compare alternatives
- **Webinar with stakeholders** to present JASPERS assessment on the basis of the proposed multi-criteria methodology



# Horizontal support: DH

Contribution to **strategic options analysis** based on following methodology:



# Conclusions

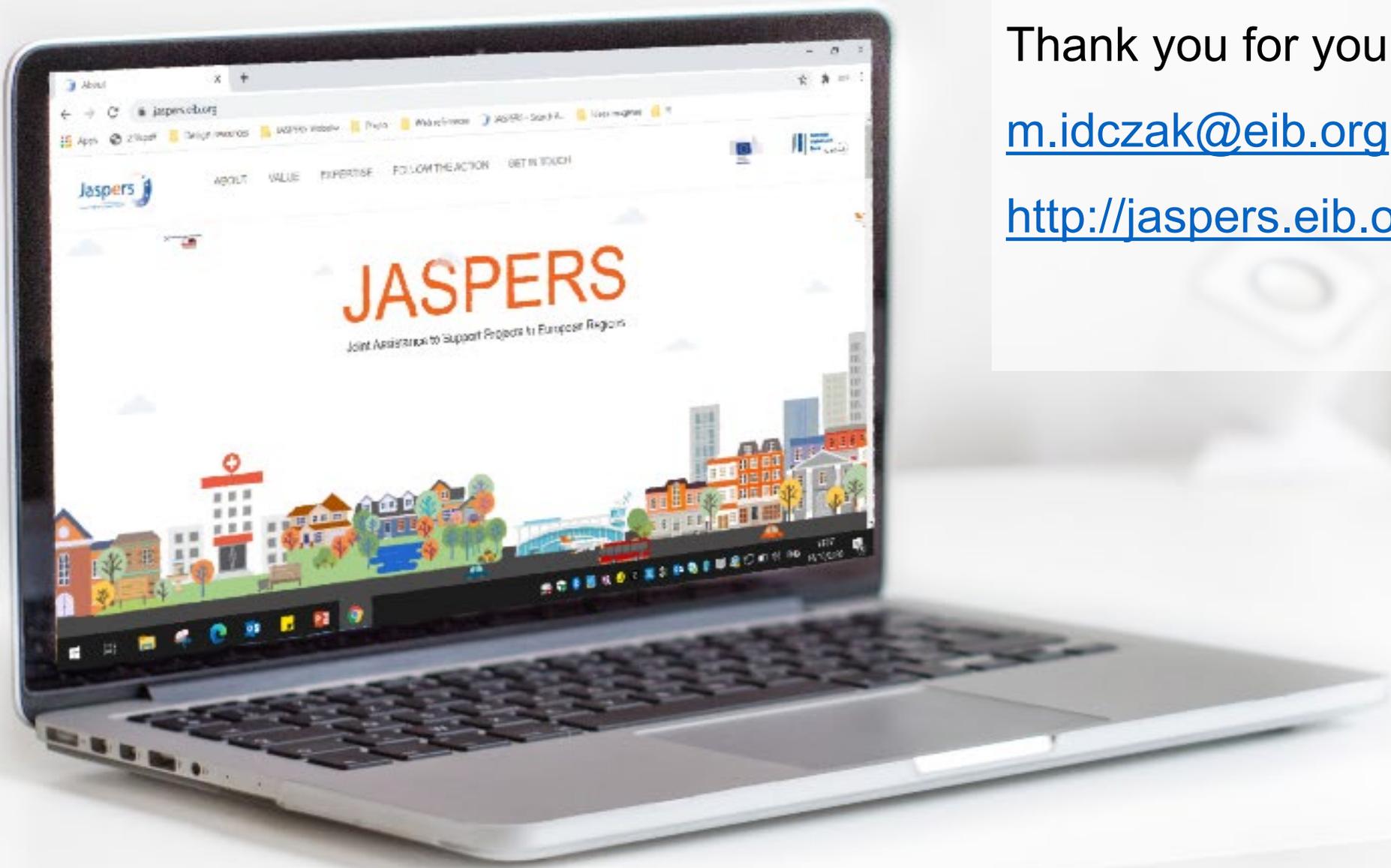
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- Key challenges include meeting climate targets, absorbing funds as well as addressing new priorities.
- The focus under current MFF changes from key energy infrastructure to smaller projects.
- JASPERS Energy has good experience working with horizontal assignments in the past, notably in:
  - EE in buildings
  - DH systems
- We can bring this experience forward, adjusted to the needs, and supplemented with expertise on new topics, to successfully help implement projects over 2021-2027 MFF.

# Questions

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1. Do you see any problems with absorption coming? Is competition from other funds a risk in certain sectors (MF, RFF, JTF)? How can we help tackling the issues?
2. Do you need any support on EE? What kind of support? In which sub-sectors (multi-family, single-family, public buildings; industry; SME)?
3. Will DH decarbonisation be important in your country? Do you see viable routes for decarbonisation of DH systems?
4. What kind of advisory support will be required in the following sectors: hydrogen (new sector), renewables (mature sector), smart grids and storage (combination of both)?



Thank you for your attention!

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<http://jaspers.eib.org/>

# From solid waste management to circular economy

Alina Oberdörfer, Maria Blanco Herbosa



# Content of presentation

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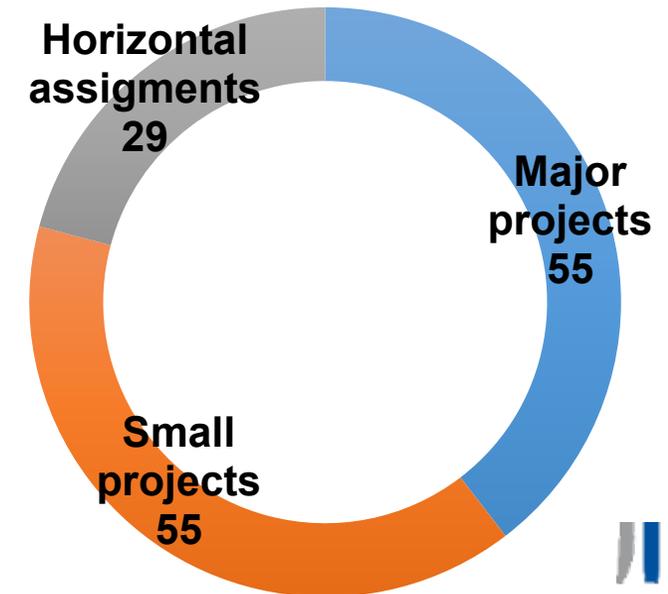
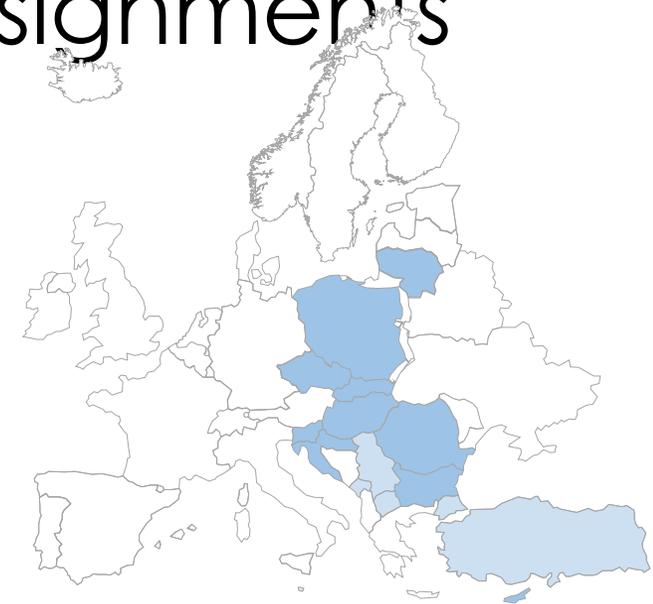
- 1. Delivered JASPERS solid waste assignments**
- 2. Current JASPERS solid waste activities**
- 3. Solid waste in MFF 2021/27 - what is the future?**
- 4. On the way to a circular economy – today towards the future**

# 1. Delivered JASPERS solid waste assignments

## JASPERS advisory support to the solid waste sector during 2006 – 2019

- **14 countries supported:**
  - 10 EU Member States and
  - 4 IPA countries
  
- **139 assignments delivered:**
  - Major projects – 40%
  - Small projects – 40%
  - Horizontal assignments – 20%

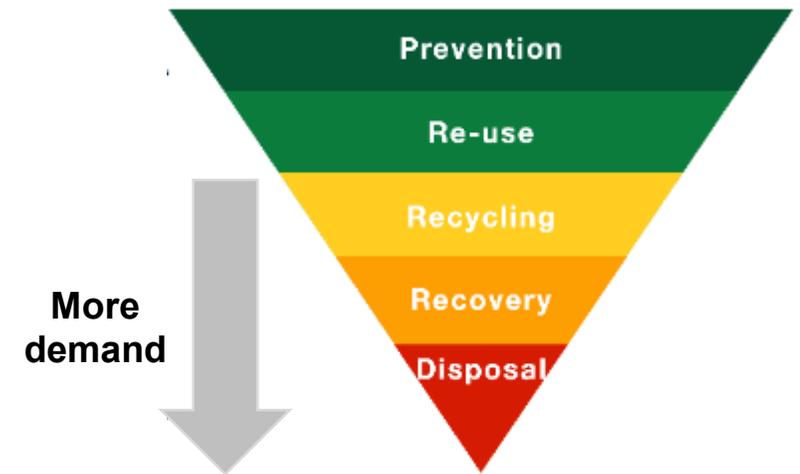
French  
Overseas  
Departments

# 1. Delivered JASPERS solid waste assignments

Main components of the past solid waste projects:

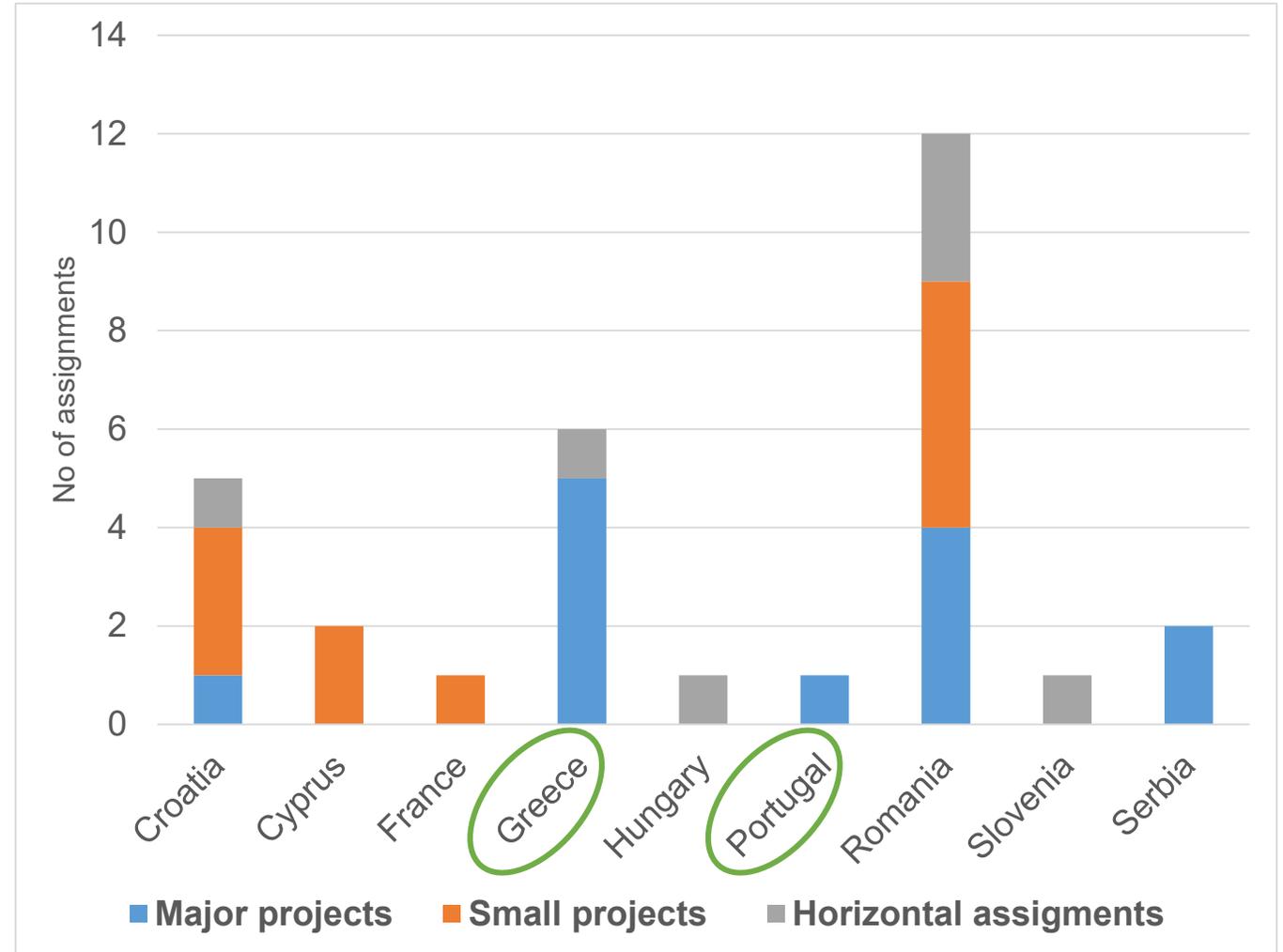
- Separate collection system for recyclables in bring system
- Sorting stations
- Composting stations for green waste
- MBT plants for residual waste
- Incinerators with energy recovery
- Closure of dumpsites
- New landfills



# 2. Current JASPERS solid waste activities

## JASPERS advisory support to the waste sector, 2020 - 2021

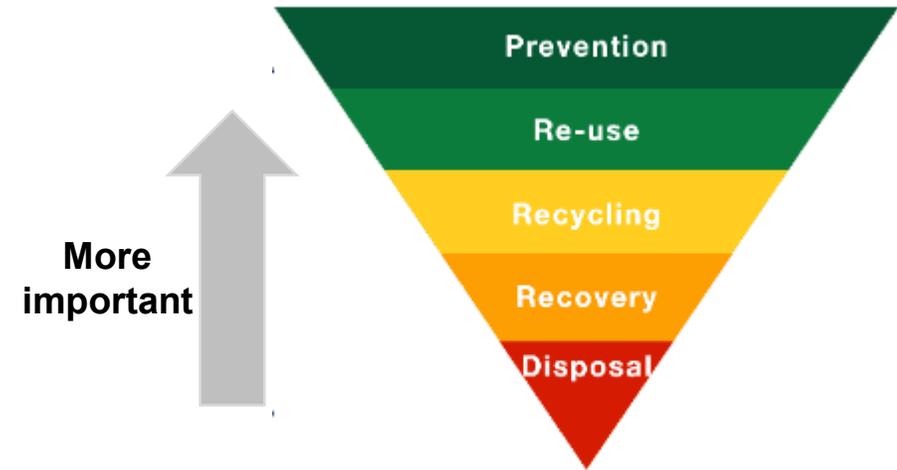
- **9 countries:**
  - 8 EU Member States (Greece and Portugal new)
  - 1 IPA country
  
- **31 assignments:**
  - Major projects
  - Small projects
  - Horizontal assignments



## 2. Current JASPERS solid waste activities

Main components of the current solid waste projects:

- Upgrade of the separate collection systems for recyclables
- **Separate collection systems for bio-waste**
- Public amenity centers for special waste streams
- **MBT plants for both separately collected waste and residual waste**



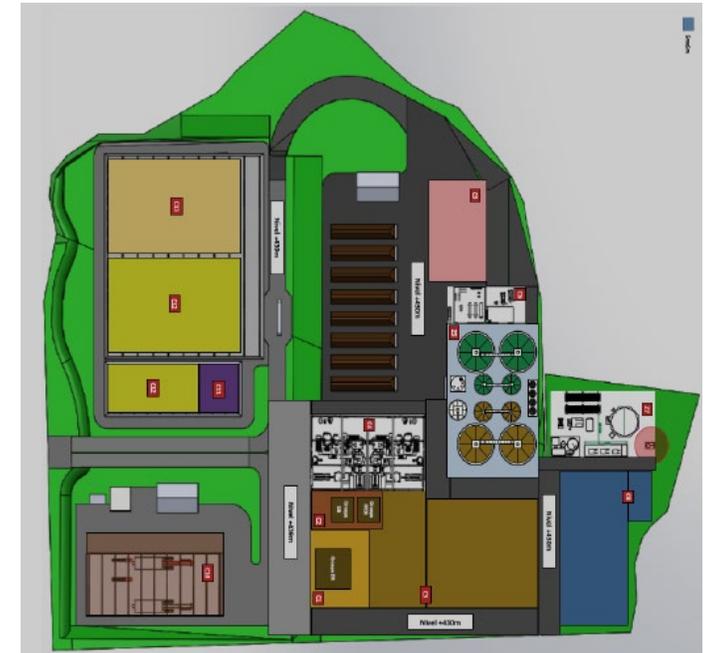
## 2. Current JASPERS solid waste activities

The **current solid waste projects** support:

- Fulfilment of all Circular Economy Package targets
- Fulfilment of the eligibility criteria (Article 7 of Regulation 2021/1058 on ERDF and CF)

**The specific criteria for the residual waste treatment will be confirmed together with DG ENV and DG REGIO**

- Complementarity with the RRP investments



Source: Draft FS. New MBT in Sibiu, Romania

## 2. Current JASPERS solid waste activities

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Various JASPERS solid waste **horizontal assignments**:

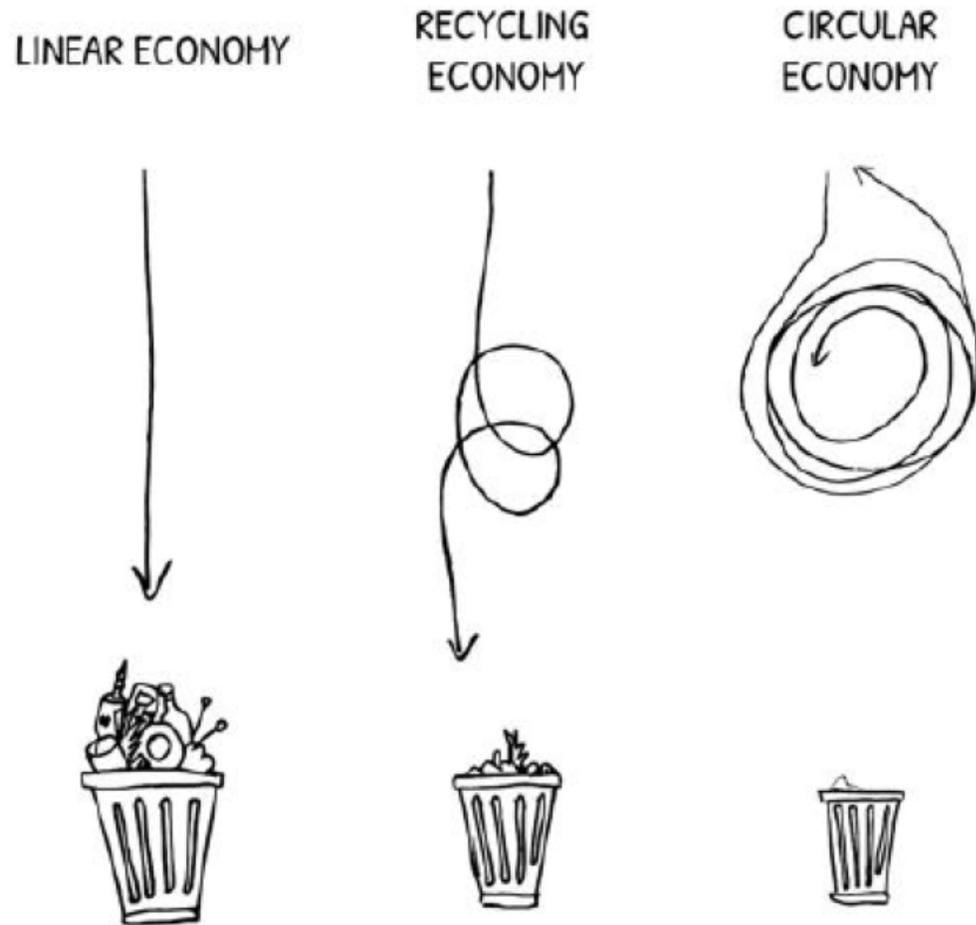
- **Upstream support**
  - Preparation of waste management plans (Romania, Slovenia, Greece)
  - Preparation of solid waste project pipelines
  - Specific capacity building and advice
- **Downstream support**
  - HU – EPR scheme for packaging waste
  - RO – EPR scheme for packaging waste, payment mechanism, template for DBO contracts

# 3. Solid waste in 2021/27 MFF – what is the future?

- Continuing the support for waste project preparation, in line with the CEP, Regulation 2021/1058 on ERDF and CF, and the Taxonomy
- Increasing the upstream support to help the generation of project pipelines and projects
- Increasing the downstream support to ensure the proper operation of the new waste infrastructure

**Attention: JASPERS future support for the solid waste sector shall be included in the Country Work Programs (CWPs). We can assist in case of questions!**

# 4. Circular economy. Concept



**Waste is material  
waiting to be identified.**

# 4. Circular economy. Context

- Young and very dynamic subject
- Still under definition
- Cross-sectorial character. Transversal
- Builds on synergies, but needs coordination and leadership
- Based on stakeholders involvement
- Implies new opportunities and risks

Upstream approach



Urban and regional infrastructure projects from all sectors play a significant role in the transition towards a circular economy.

**Good strategy making is key to develop good projects.**

# 4. Circular economy. Assignments

## Circular Economy Strategy and Project Pipeline Development in Cantabria, **Spain**

### CONTEXT

Cantabria is developing its Circular Economy Strategy

### JASPERS OBJECTIVE

- Share best practice in the EU
- Guide through the process
- Help identifying projects to be financed through the OP 2021-2027



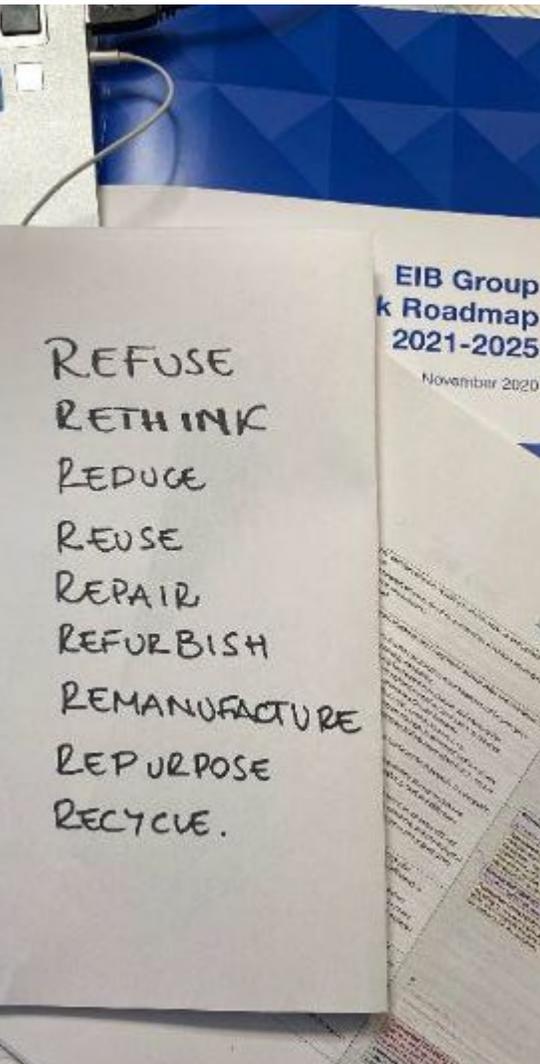
### JASPERS ROLE

**Accompanying**      **Advising**      **Assisting**

### JASPERS INPUT

- Guidance notes
- Review of strategic documents
- Meetings

# 4. Circular economy. Motivation and expectation



## Motivation to develop CE strategy

- Economic growth
- Markets are moving towards circular economy
- Different actors are pushing in this way
- Authorities have a key role to play
- Environmental impact and CC

## Expectation from JASPERS

- Cross sectoral experience
- Best practices in EU
- Big picture of circular economy scene
- Potential synergies
- Identify projects
- Link to ERDF and Cohesion Fund
- General guidance

# 4. Circular economy. Towards the future

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A circular economy strategy is

- A powerful tool to benefit the economy and the environment of regions
- The starting point to promote that projects contribute to the transition towards a circular economy



**Attention: JASPERS future support for circular economy shall be included in the Country Work Programs (CWPs). We can assist in case of questions!**

# 4. Thank you for your attention

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## Questions & Answers with

- Alina Oberdörfer, senior JASPERS expert based in Bucharest
- Maria Blanco Herbosa, senior JASPERS expert based in Vienna
- Philipp Horn, Head of JASPERS Solid Waste & Circular Economy division based in Luxembourg

# Closure of this Breakout Session

Moderation Ralf Goldmann

**Thank you for joining!**