

# **Survey results: Potential of a regional approach to providing data and assumptions**

**Regional Exchange of Modelling Experts involved in the Development of Integrated National Energy and Climate Plans (NECPs) in the WB6**

16-March-2022

Consolidate on recent exchanges on “Indicators, data and assumptions”:

- 15-Dec-2021: Parameters and variables reported under Croatia’s and Austria’s NECP;
- 19-Jan-2022: ODYSSEE-MURE Database on energy efficiency indicator and policy evaluation;
- 23-Feb-2022: Introduction to the SHARES tool and experiences from applying it in Croatia.

Envisage potential next steps

- Can and should parameters/ input data be compared across the region?
- Do modellers from the region face similar challenges with data sources for certain parameters/ input data?
- Would it be beneficial to provide regional guidelines/ a database or conduct surveys to overcome these challenges?

# Improvement suggested: Sectors

In your work on NECP scenarios, in which sectors would you want to improve input data?  
(x for one reply, x for multiple replies)

	Activity data	Emission factors	Energy intensity	Technology costs
Energy supply			x	x
Energy demand – Households/ commercial sector	x			
Energy demand – Manufacturing industries	x		x	x
Energy demand – Transport	x		x	
Industrial processes/ product use	x		x	x
Agriculture	x			x
Forestry	x			
Waste/ wastewater	x			x

# Improvement suggested: Activity data

<p>Please specify, for which sector/ subsector/ activities the data should be improved?</p>	<p><b>Industry and transport</b> are the two sectors with lowest activity</p>	<ul style="list-style-type: none"> <li>• <b>Energy consumption in households and commercial sectors:</b> frequent surveys, especially service and public subsectors;</li> <li>• <b>Transport:</b> access to data on vehicles fleet at more disaggregated level;</li> <li>• <b>IPPU:</b> collection and access to data on product uses;</li> <li>• <b>Agriculture:</b> livestock population and farms management practices (e.g. feeding and waste management practices);</li> <li>• <b>Forestry:</b> Forest inventories;</li> <li>• <b>Waste/wastewater:</b> Access to data on waste management and waste composition and future plans for waste management, access to data from wastewater treatment plans.</li> </ul>
<p>What are your current sources for this activity data?</p>	<p>Strategic documents mostly</p>	<p>Mainly national statistics and surveys for some subsectors (e.g. agriculture, households energy demand).</p>
<p>What activities would need to be conducted to support improvement?</p>	<p>Surveys on consumption among households should be done at least once in 3 years</p> <p>→ national inventory systems and systems for PaMs and projections</p>	<p>Frequent surveys to update the data that are not regularly published by national statistics</p> <p>→ national inventory systems and systems for PaMs and projections (Jan/ 2023 onwards)</p>
<p>Could a regional approach be beneficial? If yes, what kind of activities should be conducted at regional level?</p>	<p>Regional approach and coordination over the same sets of data will be very beneficial</p> <p>→ Odyssee-MURE DB on energy efficiency indicators and policies</p>	

# Improvements suggested: Energy Intensity

Please specify, for which sectors/ sub-sectors/ technologies assumptions on energy intensity could be improved?	<b>Industry and transport</b> are the two sectors with lowest intensity, especially for the subsectors of industry	Improvement of energy intensity for the <b>transport and manufacturing</b>	<b>IPPU</b>
What sources do you currently use e.g. survey, international studies?	Mostly national statistics collected for the purpose of Eurostat	Surveys but bad quality of data	International studies and national data if available
What activities would need to be conducted to support improvement?	Involvement of GDP forecast professionals against investments into EE and RE	Update of surveys	Frequent surveys
Are there plans for improvement already? If yes, what activities do you plan?	No plans for improvement	Every five years Statistical Agency do survey; every year one sector	N/A
Could a regional approach be beneficial? If yes, what kind of activities should be conducted at regional level?	Regional approach and coordination over the same sets of data will be very beneficial	Yes, guidelines, database	Yes, guidelines in case no data are available, creation of database of similar industrial processes in the region
	→ Odyssee-MURE DB on energy efficiency indicators and policies		→ <b>Let's specify!</b>

# Improvements suggested: Technology costs

<p>Please specify, for which sector/ sub-sector/ technology the cost assumptions could be improved.</p>	<p>energy supply and manufacturing</p>	<p><b>IPPU, Agriculture, Waste</b></p>
<p>What are your current sources for technology cost assumptions?</p>	<p>Different international studies</p>	<p>International databases, IRENA, JRC, NREL, etc.</p>
<p>What activities would need to be conducted to support improvement?</p>		<p>Access to studies and databases that contain such information</p>
<p>Could a regional approach be beneficial? If yes, what kind of activities should be conducted at regional level?</p>		<p>Yes, e.g. databases on technologies available in the region (including best available technologies)</p> <p>→ <b>Let's specify!</b></p>

# Improvement suggested: Dimensions

What dimension(s) would need further improvement in the future in terms of parameters/ input data? If any, for which of those would you prefer a regional approach?  
 (x for one reply, x for multiple replies)

	Improvement needed	Regional approach possible
Decarbonization	x	x
Renewable energy (as part of Decarbonization)	x	x
Energy efficiency	x	x
Energy security	x	x
Internal energy market		x
Research, innovation and competitiveness	x	x



# Improvement suggested: Dimension (II)

<p>Please specify, which parameters/ input data could be improved?</p>	<p>Data for GHG emission, monitoring</p>		<ul style="list-style-type: none"> <li>• Energy security - regional data;</li> <li>• Research, innovation and competitiveness - national databases on research an innovation, disaggregated by sectors relevant for the NECP.</li> </ul>
<p>What activities would need to be conducted to support improvement?</p>			<ul style="list-style-type: none"> <li>• Structuring of data collected through surveys in correlation to climate and energy activities.</li> </ul>
<p>Please specify, which parameters/ input data can or should be supported by a regional approach.</p>	<p>Balancing of electricity; through guidelines</p>	<ul style="list-style-type: none"> <li>• Primary energy supply</li> <li>• Final energy consumption per main sectors</li> <li>• Types of EE measures in residential sector</li> </ul>	<ul style="list-style-type: none"> <li>• economic parameters</li> </ul>
	<p>→ Let's specify!</p>	<p>→ Odyssee-MURE DB</p>	
		<ul style="list-style-type: none"> <li>• Costs and Investments for RES</li> </ul>	<ul style="list-style-type: none"> <li>• Data on technologies (cost, availability, efficiency, lifetime),</li> </ul> <p>→ Let's specify!</p> <ul style="list-style-type: none"> <li>• RES shares in line with Eurostat share took for all</li> <li>• CO2 reduction with and without ETS</li> </ul> <p>→ Regional NECP consultations as a first step?</p>



**When considering the impact of certain policies and measures, which sectors/ dimensions have been particularly challenging in your NECP?**

- Calculation of impact of certain energy efficiency measures in terms of energy savings per sources
- Energy efficiency in industry
- Energy efficiency in transport
- RE investments for wind and solar
- Economic growth
- IPPU, Agriculture and LULUCF

# Prices: Fuel, carbon, exchange rates

In your work on NECP scenarios, where do you source the following parameters/ variables from? Are you satisfied with your source(s)? Would you prefer or consider, if they were recommended for the whole region?  
 (x for one reply, x for multiple replies)

	Intl. source(s)	Nat. source (s)	Regional recommendation desirable
Intl. oil import prices [EUR/GJ or euro/toe]	x	x	x
Intl. gas import prices [EUR/GJ or euro/toe]	x	x	x
Intl. coal import prices [EUR/GJ or euro/toe]	x	x	x
Carbon price [euro/tCO <sub>2</sub> e]	x		x
Exchange rates to EUR and USD	x	x	x

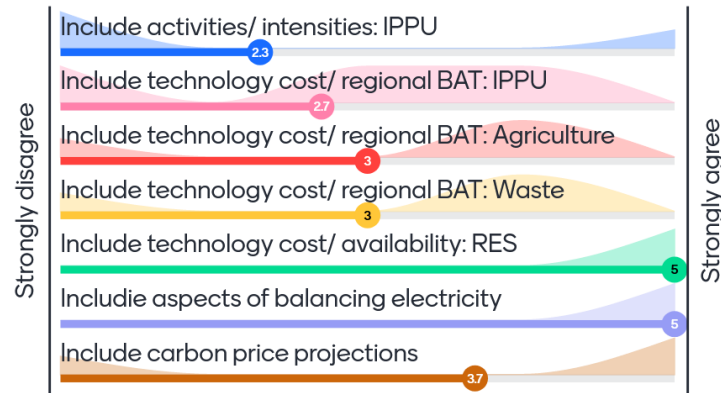
Topic	Suggestion	Next step
Activity data: energy consumption in households/ commercial sector/ transport industry, IPPU, agriculture, forestry, waste	<ul style="list-style-type: none"> <li>national survey(s)</li> </ul>	<ul style="list-style-type: none"> <li>✓ Improvement expected, when national inventory systems and systems for PaMs and projections become operational (Jan/ 2023 onwards)</li> </ul>
Energy efficiency/ intensity indicators: transport, manufacturing	<ul style="list-style-type: none"> <li>regional approach</li> </ul>	<ul style="list-style-type: none"> <li>✓ Expected under Odyssee-MURE project on energy efficiency indicators and policies</li> </ul>
Activity/ intensity: IPPU	<ul style="list-style-type: none"> <li>guidelines in case no data are available</li> <li>creation of database of similar industrial processes in the region</li> </ul>	<p><b>Let's agree!</b></p> <p><a href="http://www.menti.com">www.menti.com</a></p> <p><b>Code: 8754 5888</b></p> <p><b>Let's specify!</b></p> <p><a href="http://www.menti.com">www.menti.com</a></p> <p><b>Code: 6726 6265</b></p>
Technology cost	<ul style="list-style-type: none"> <li>IPPU, agriculture, waste: databases on technologies available in the region (including best available technologies)</li> </ul>	
	<ul style="list-style-type: none"> <li>Data on technologies (cost, availability, efficiency, lifetime)</li> <li>RES: Cost and investments</li> </ul>	
Carbon price	<ul style="list-style-type: none"> <li>recommendations</li> </ul>	
Energy security	<ul style="list-style-type: none"> <li>Balancing of electricity: guidelines</li> </ul>	
	<ul style="list-style-type: none"> <li>Regional plans for energy transition</li> </ul>	<b>Regional NECP consultations as a first steps?</b>

# Mentimeter – Question 1

Go to [www.menti.com](http://www.menti.com) and use the code 8754 5888

Which of the following topics would you consider and support for setting up a regional database/ guideline:

 Mentimeter



Press S to show image



Go to [www.menti.com](http://www.menti.com) and use the code 7744 1659

Guidelines on balancing electricity: What aspects/ data/ indicators to consider?

gas sustainability

Press **s** to show image





# THANK YOU FOR YOUR ATTENTION

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## GET IN TOUCH

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**Considering that various energy and climate planning and reporting efforts have to be conducted for the period up to 2030: How could access to local data from other projects, such as GHG inventories or the NDC work be improved at national level or even at regional level?**

- GHG, NDC and NECP should at the end speak the same results.
- Establishing collaboration between teams working on different projects in the same area is essential for having consistent and applicable plans and reports. Access to data used in other studies/reports in the energy and climate area at a more centralized level (via open online databases or "one-stop-shop" possibility) will ease developing the planning documents relevant for these areas.