

DanuP-2-Gas

Project Status, Updates and Perspectives for Stakeholders

 28th September, 2021, Stakeholder Event (Zagreb / online)

 Project Presentation

 Astrid Heindel, Technology Centre for Energy

About the project

Innovative model to drive energy security and diversity in the Danube Region via combination of bioenergy with surplus renewable energy

Duration

30 Month, July 2020 – December 2022

Budget in Euro:

Total: 2.553.726,85

European Regional Development Fund (ERDF): 2.109.336,02

Instrument for Pre-Accession Assistance (IPA): 61.331,75

Consortium



Technology Centre for Energy (Lead Partner)

- Deggendorf Institute of Technology (PP6)
- Energy Agency of Savinjska, Šaleško and Koroško Region (PP1)
- Tolna County Development Agency (PP2)
- MAHART Freeport Co. Ltd. (PP9)
- Energie Institut an der Johannes Kepler Universität Linz (PP3)
- Black Sea Energy Research Centre (PP4)
- URBASOFIA (PP5)
- National Recycling Agency Slovakia (PP7)
- Institute of Technology and Business in České Budějovice (PP8)
- International Centre for Sustainable Development of Energy, Water and Environment Systems (PP10)
- Energy Institute Hrvoje Pozar (PP11)
- University of Zagreb, Faculty of Electrical Engineering and Computing (PP12)
- Regional Agency for Socio Economic Development - RDA Banat (IPA PP1)

Associated Partners



- Government of Lower Bavaria (ASP 7)
- Bavarian Ministry of Economic Affairs, Regional Development and Energy (ASP 10)



- Ministry of Infrastructure, Directorate for Energy, Slovenia (ASP 1)
- Ministry of the Environment and Spatial Planning, Slovenia (ASP 2)
- Municipality of Celje, Slovenia (ASP3)



- Ministry of Agriculture of the Czech Republic (ASP4)



- Hungarian Biogas Association (ASP 5)
- Ministry of Foreign Affairs and Trade of Hungary (ASP 8)



- JP Elektroprivreda Hrvatske Zajednice, Mostar, Bosnia and Herzegovina (ASP 6)



- Bioenergetic Association, Republic of Moldova (ASP 9)

Motivation

- Strong dependence on energy imports in the Danube region

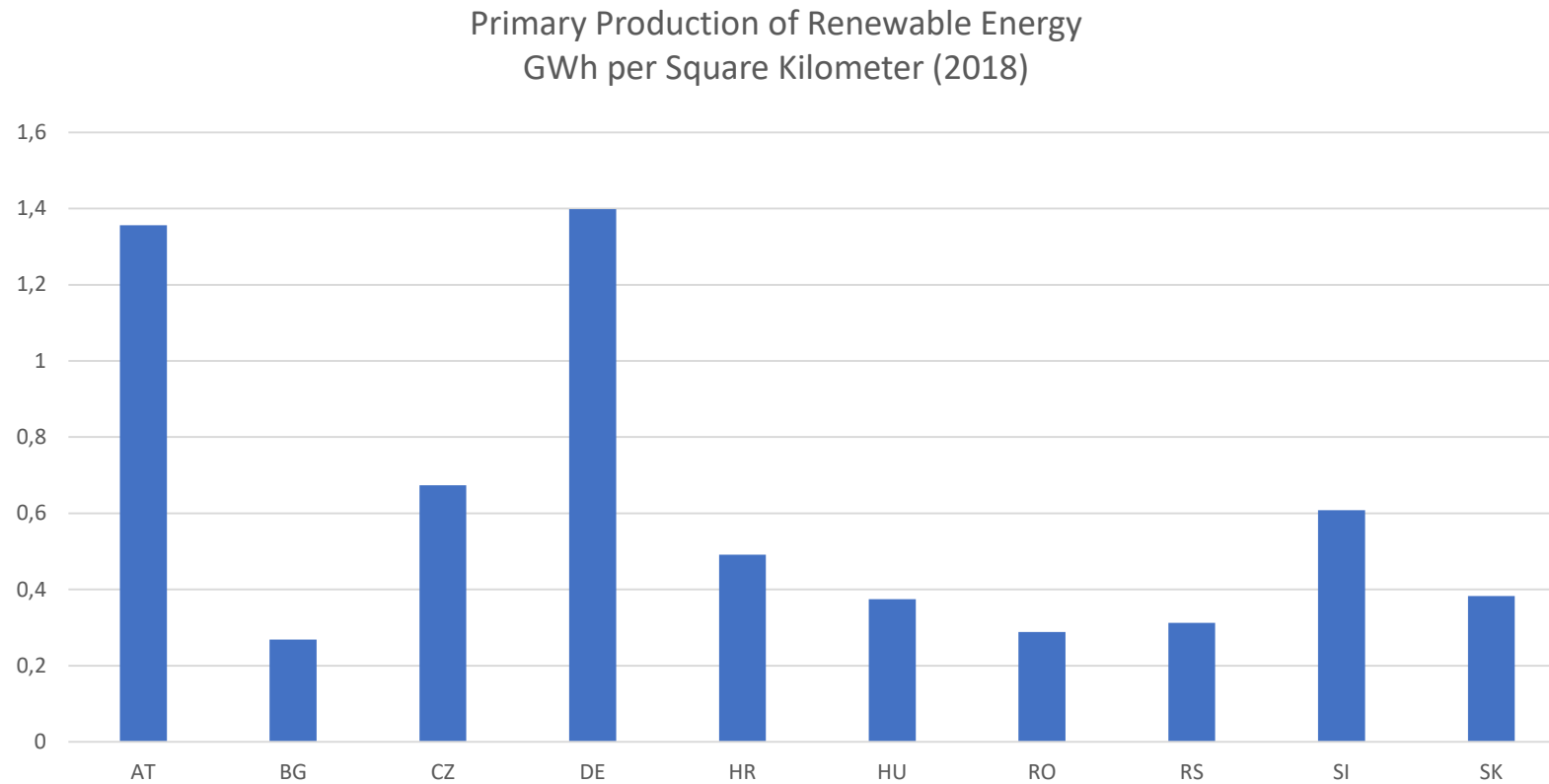
Country	AT	BG	CZ	DE	HR	HU	RO	SI	SK
Natural gas (TJ)	551.640	120.650	312.387	3.796.620	48.902	336.120	54.722	32.600	168.251
Natural gas imports from Russia (TJ)	0	120.650	312.307	2.287.481	0	319.314	54.119	11.084	166.252
Share (%) of natural gas imports from Russia	0,00	100,00	99,97	60,25	0,00	95,00	98,90	34,00	98,81

Date Source: <https://ec.europa.eu/eurostat>



Motivation

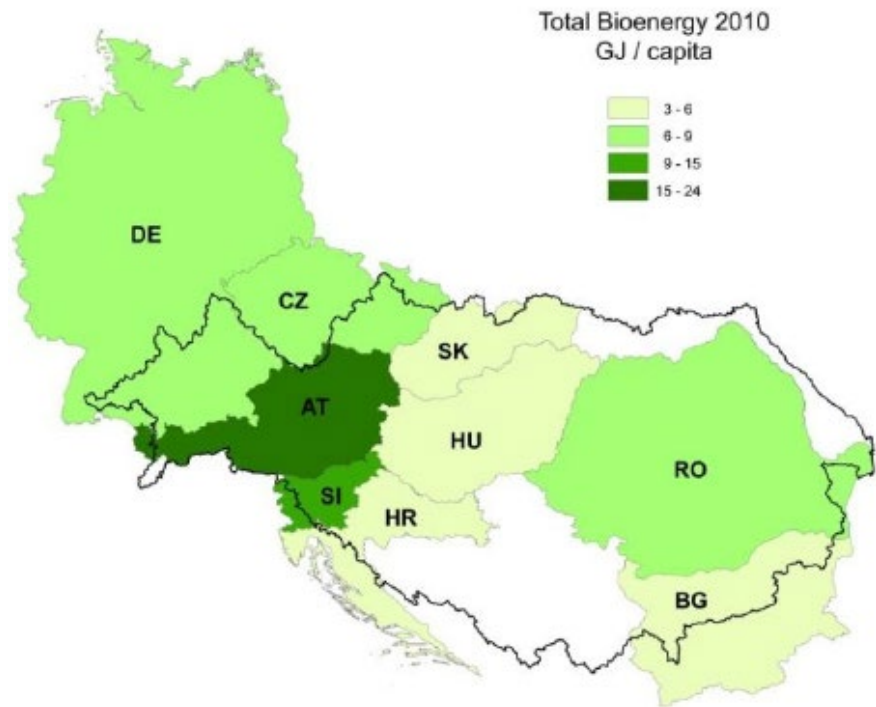
- Low share of renewables



Data Source: <https://ec.europa.eu/eurostat>

Motivation – Potential

- Low use of biomass (graph) with very high biomass potential



Source: Bioenergy deployment in the Danube Region (2014)
(Report EUR 26647 EN)

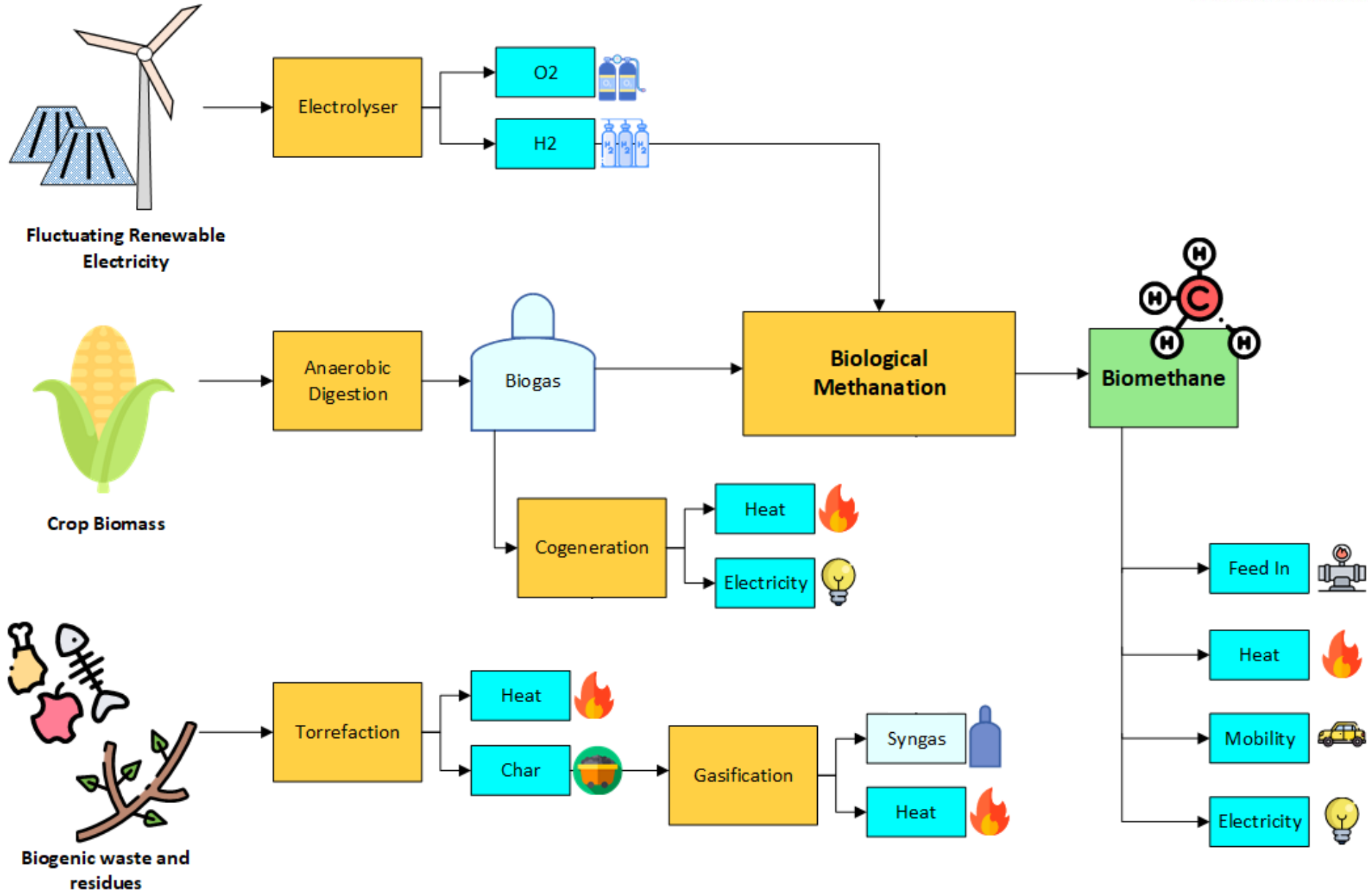
- Well developed gas grid



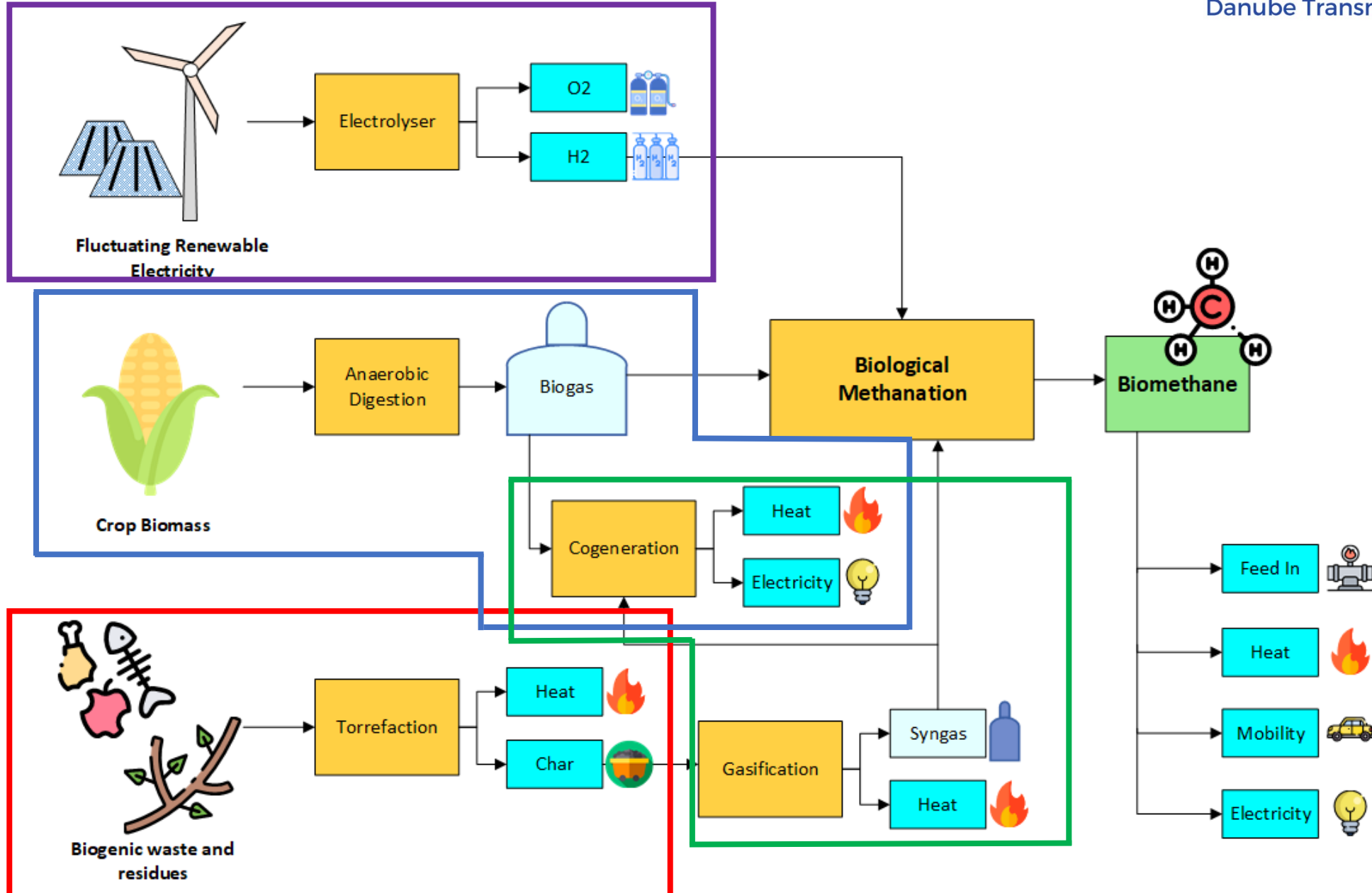
Source: Bundesverband der Energie- und Wasserwirtschaft
https://www.bdew.de/media/documents/20160525_Erdgasnetz-Europa-Karte-2015.pdf

Project Goals

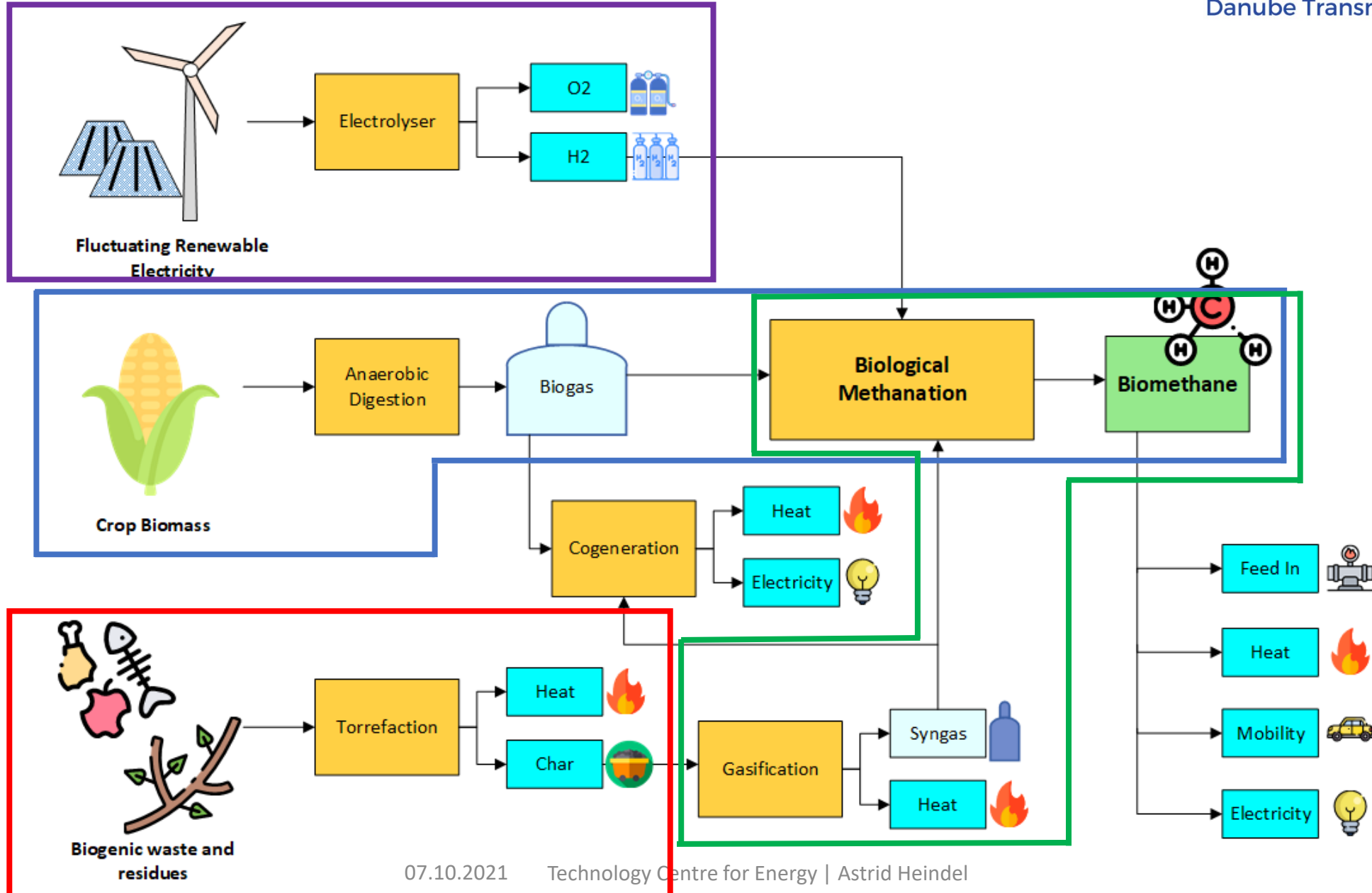
- Building a transnational and transsectoral energy community
- Increasing energy security through diversification of energy sources
- Increasing the production and use of renewable energy
- Development of instruments for the coupling of the gas and electricity sector
- Guiding the way to new energy storage investments



Images by Smashicon, Freepik, Eucalyp, Flat Icons, Good Ware, Linector on flaticon.com



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Project Contributions



Analysis of existing infrastructure (gas grid, renewable energy plants, transport hubs) and biogenic waste resources in the Danube region



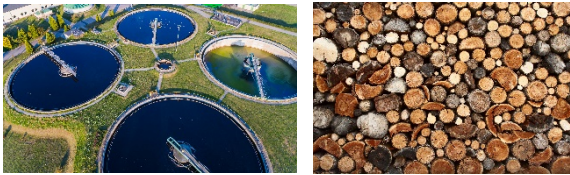
Danube Energy Platform



Image source: www.energy-barge.eu



Optimisation Tool for ideal locations of Power-to-Gas hubs



Legal framework and transnational strategy development



Subsidies Catalogue




Forum for Future Projects





Transnational Renewable Energy Atlas

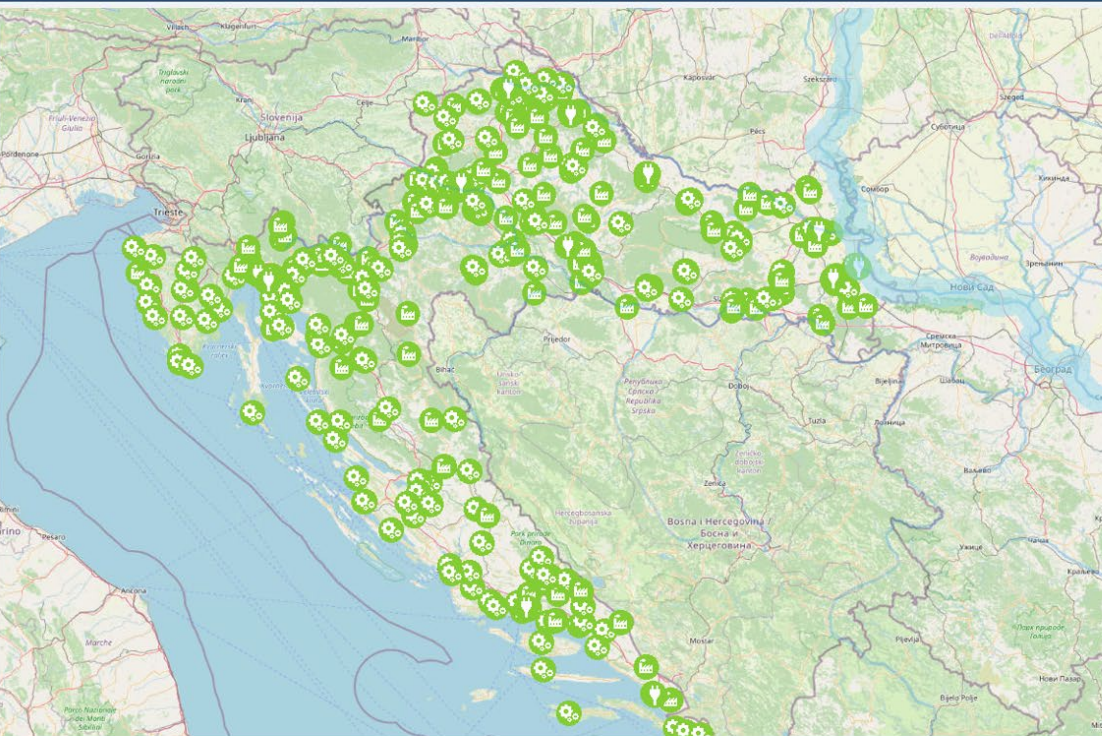


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ABOUT ▾
KNOWLEDGE HUB ▾
INTERACTION ▾
ATLAS TOOL
LOGIN

DANUP-2-GAS Atlas

- Austria
- Bulgaria
- Croatia
- Czech Republic
- Germany
- Hungary
- Romania
- Serbia
- Slovakia
- Slovenia



TRANSNATIONAL BIOMASS & INFRASTRUCTURE

- **Biomass**
 - Wood and woody
 - Herbaceous
 - Aquatic
 - Animal and human waste
- **Infrastructures**
 - Renewable energy plant
 - Industrial plant
 - Connection point
 - Transport hub
 - Transnational link

COMPANY PROFILE


Type:
Subtype:
Brief description:


OPTIMIZATION TOOL


📍 Source Location (Drag & Drop)

Export to PDF

Transnational Renewable Energy Atlas

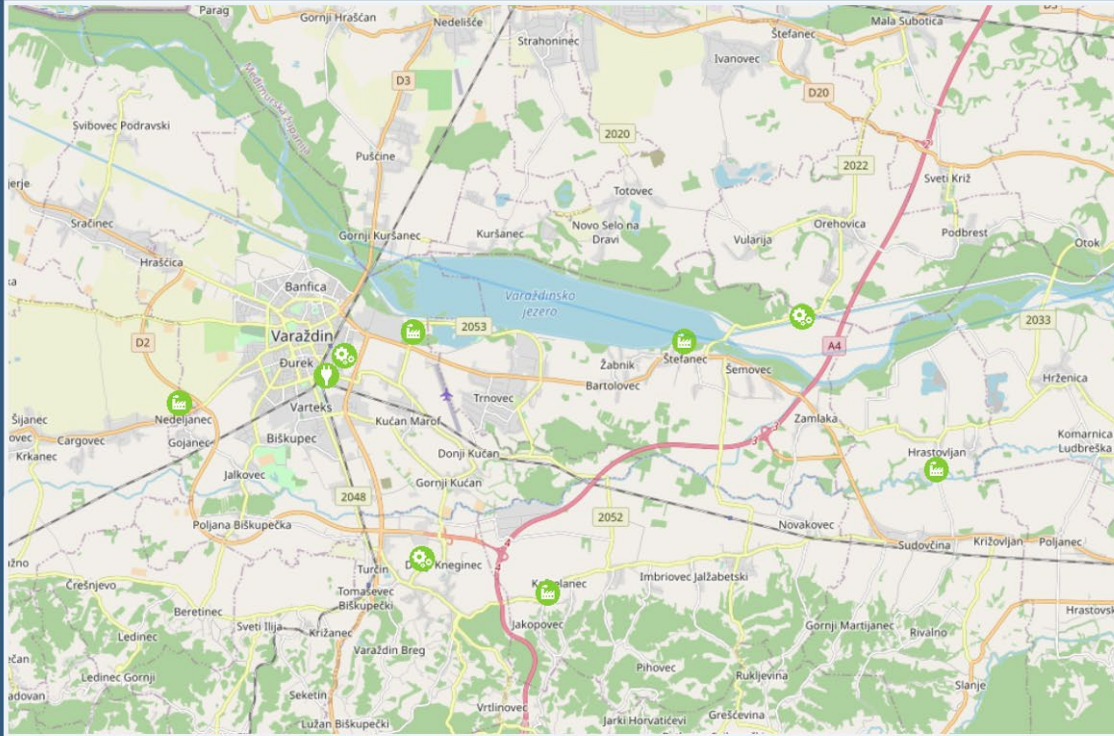















ABOUT ▾ KNOWLEDGE HUB ▾ INTERACTION ▾ ATLAS TOOL  LOGIN

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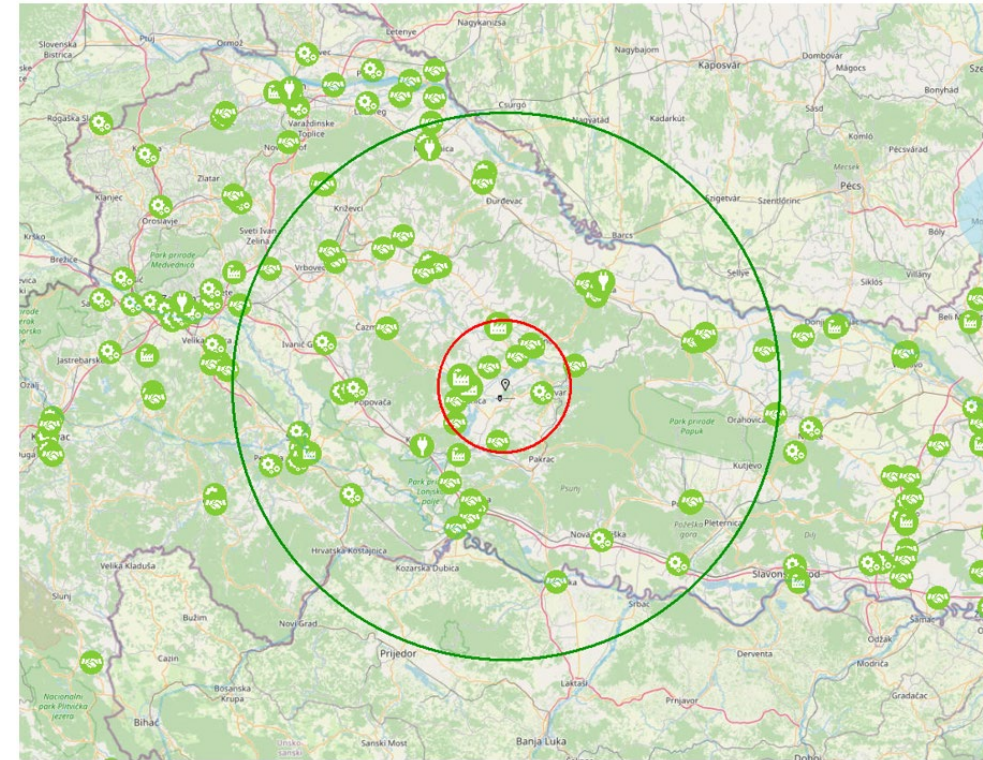
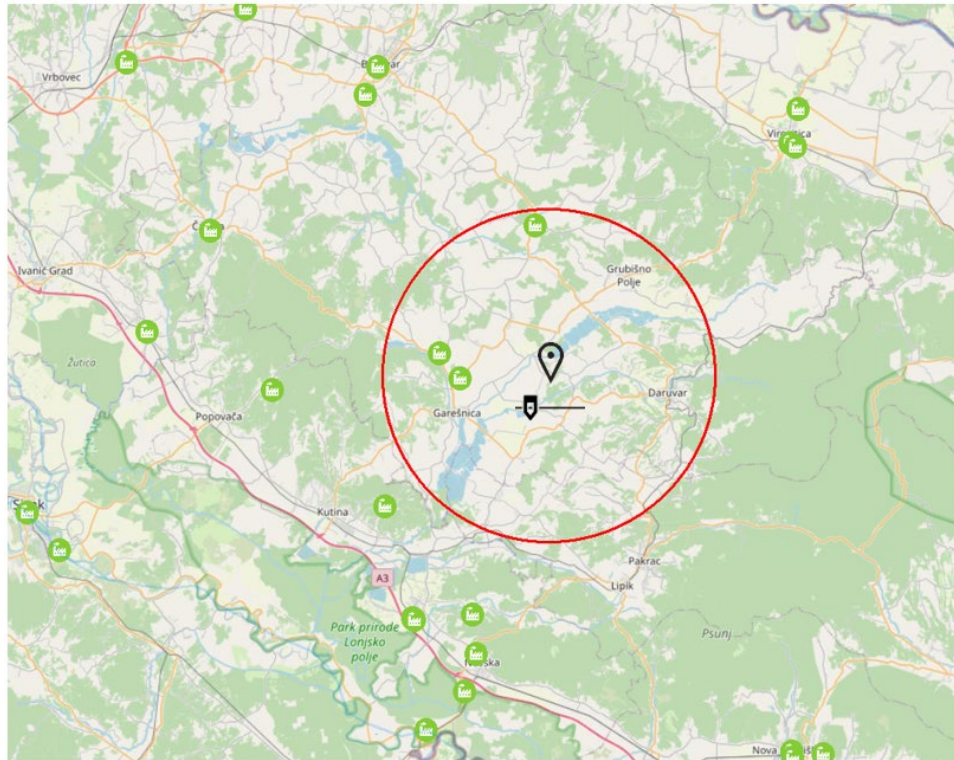
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Optimisation Tool



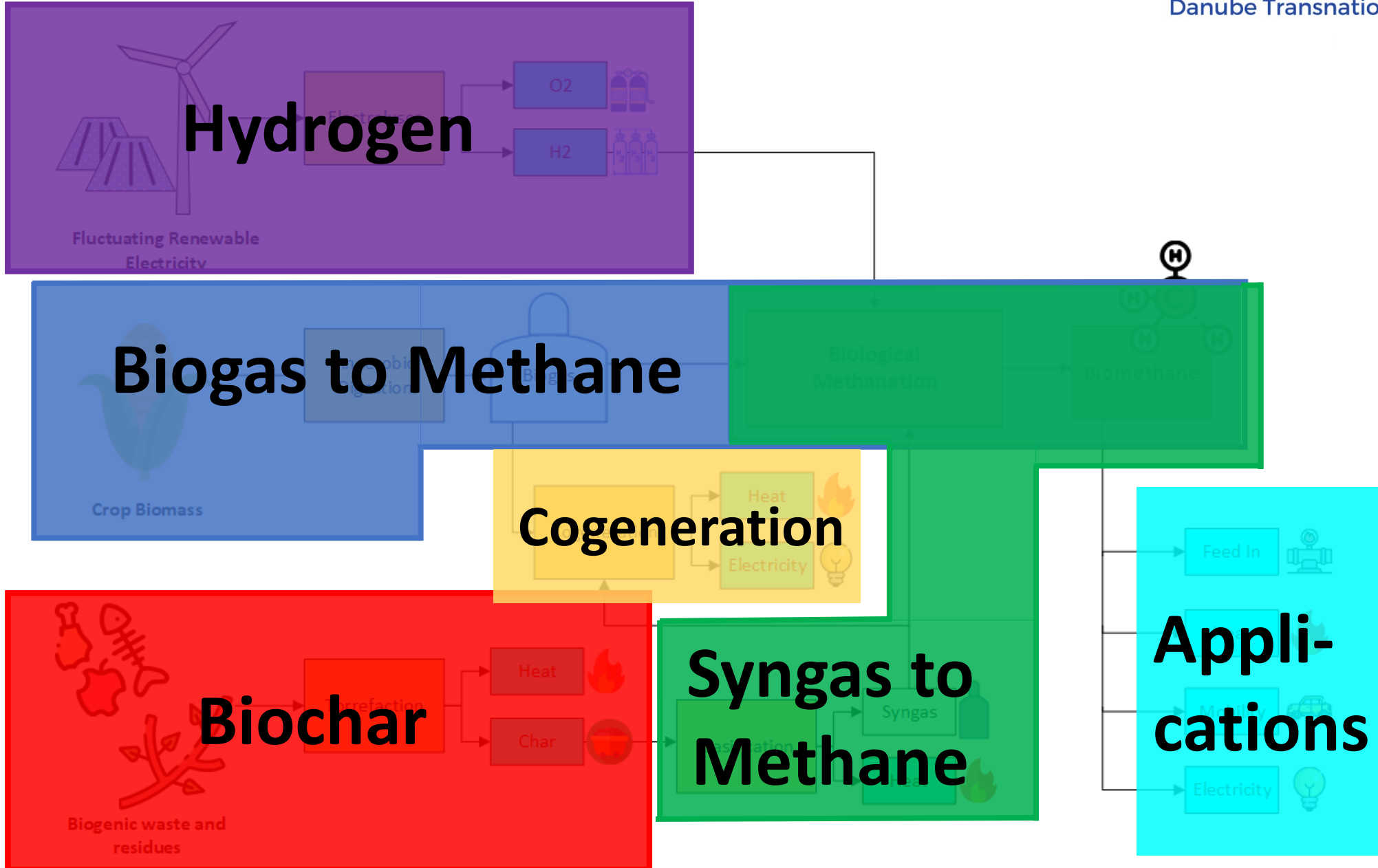
Output: Economically optimal parametrisation of P2G-hub investment
(volumes, power capacities, energy capacities)

Other Tools

- Subsidies catalogue
 - List of subsidies and funding possibilities for partner countries
 - Description of the programme, funding volume, participating countries etc.
- Forum
 - Project fair for creating and sharing ideas
 - Find partners
- Reports on biomass resources and infrastructure
 - For partner countries
 - Overall report
- Reports on the legal situation in partner countries and Europe
- Transnational strategy for sector coupling

Stakeholder Involvement

- Participation at stakeholder events (updates on the project, networking, presentation of own field of action)
- Trainings for the Danube Energy Platform (2022)
 - In national languages
 - In all partner countries
- Workshops for project development (2022)
 - In national languages
 - In all partner countries



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Danube Transnational Programme
DanuP-2-Gas



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Danube Energy Platform: www.danup2gas.eu

Project Website: <http://www.interreg-danube.eu/danup-2-gas>

Newsletter: <http://www.interreg-danube.eu/approved-projects/danup-2-gas/campaigns>