SERA
Institute for Sustainable Energy and Resources Availability

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Technische Universität Wien
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Regionalplanung und Regionalentwicklung
raum region

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Linking renewable energy projects at municipal level with NECP planning and reporting

Klimatag ACRP-Session 1, 3 April 2024, 11:45 - 16:00

More information: https://transformat.at/

NECP: National Energy and Climate Plan
according to EU Governance Regulation

This project is funded by the Climate and Energy Fund and is being carried out as part of the "ACRP - 14th Call, 2022" programme. https://www.klimafonds.gv.at/

Brief description of the project

NECP at federal level: Content, challenges and solutions with regard to renewable energy

Challenge: Policies and Measures regarding spatial planning and renewable energy are not well defined because responsibility of provinces and municipalities

We provide a solution to facilitate the planning and implementation of renewable energy projects

Section A of NECP template

- Compilation of status quo of policies according to dimensions of the Energy Union: (1) Decarbonisation, (2) Energy Efficiency, (3) Energy Security, (4) Energy Market, (5) Research, Innovation and Competitiveness
- Compilation of targets 2030 with a longterm vision to 2050
- Compilation of policies and measures (PaMs) to achieve the targets

Challenge: Scenarios are top down and therefore targets might not be realistic

We enable scenarios based on bottom-up information and realistic targets

Section B of NECP template

- Providing the analytical basis: data review and data collection, scenario analysis, calculations
  - Scenario with existing PaMs
  - Scenario with additional/planned/new PaMs
- Impact assessment

Municipal development plan is the framework for zoning and land-use plan which impact on the exploitable renewable energy potential

Housing

Education

Services

Agriculture & Forestry

Industry

Recreation

Ecosystem services

Energy

Guideline for revision and development: **EXISTING**

Housing

Education

Services

Agriculture & Forestry

Industry

Recreation

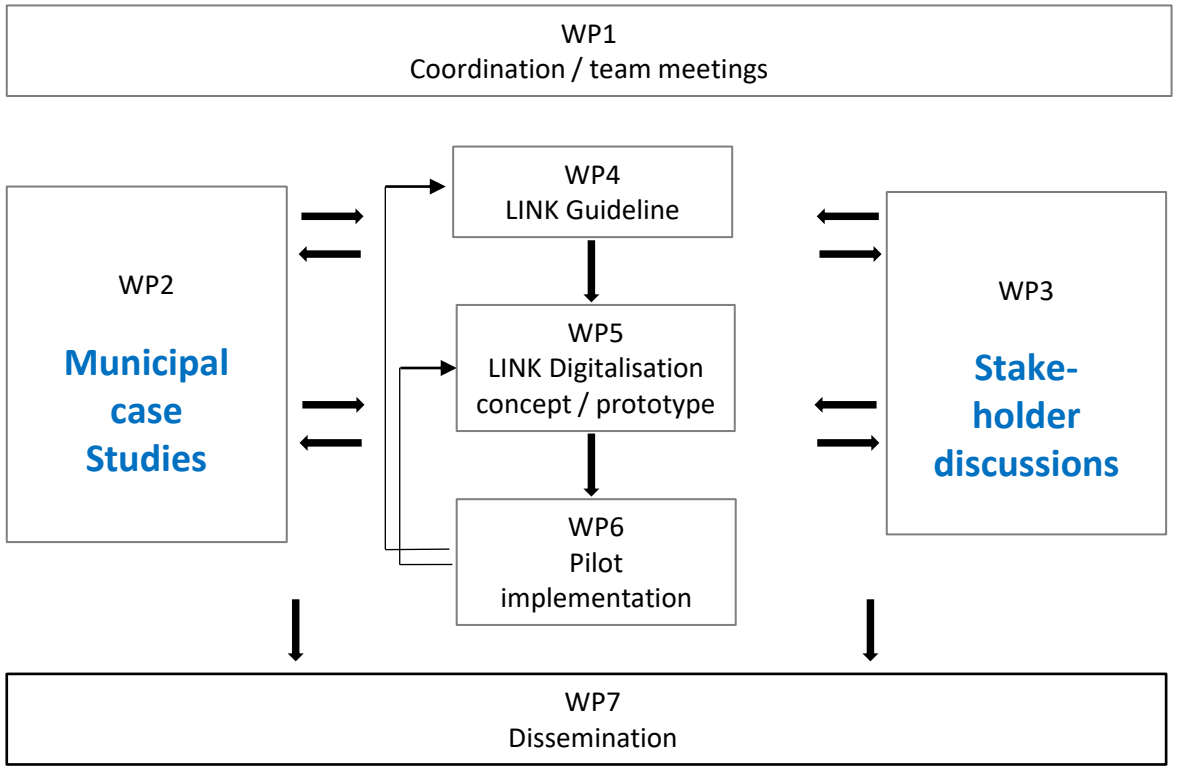
Ecosystem services

Energy - District heating and cooling networks - Renewable energy

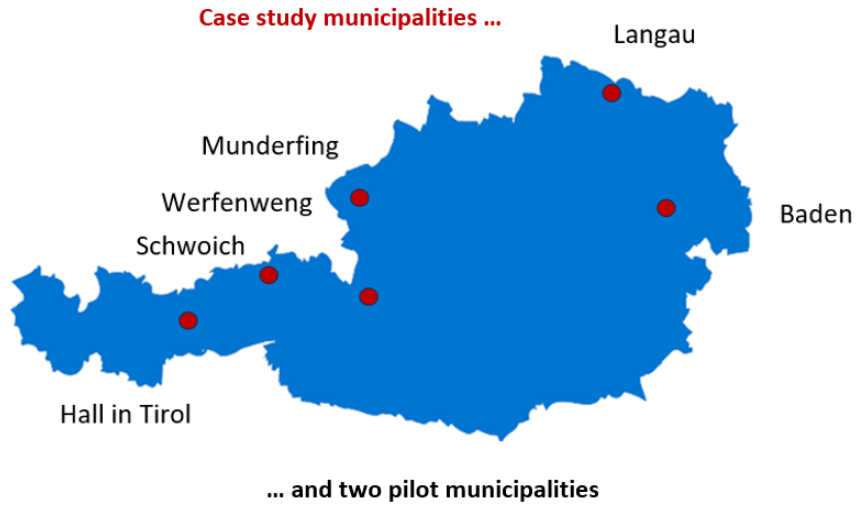
- Collection of information
- Information for the planning task
- Drawing tool with renewable energy potential
- Calculation of NECP related indicators
- Targets definition
- Making information accessible

Guideline and tool for revision and development:
NEW transFORMAT-LINK Guideline including minimum criteria for harmonisation across the Austrian provinces

Work plan and methodological approach



Stakeholder discussions:
Interviews at federal, provincial, and municipal level. Proof of hypothesis and collection of information as basis for WP4 and WP5.



First results incl. dissemination and publications

Overview of results

- **LINK-Guideline** to revise or develop municipal development concepts (see also slide 4)
- **Minimum requirements** for municipal development concepts to ensure the link with the NECP (see also slide 8)
- **The LINK-Tool (prototype)** assists in the application of the Guideline (see also slide 9):
  - Guidelines for municipal development concepts, including criteria what to consider and why
  - Data for the planning task
  - Templates for collection of information
  - Making information accessible to the public and selected third parties

In addition, the following outcomes are envisaged:

- Input for harmonization of spatial planning legislation
- Input for a funding program to support municipalities with the implementation of measures

Minimum requirements for municipal development concepts to support renewable energy projects

Minimum requirements for the development of municipal development concepts/plans: Checklist which criteria to consider and why, to pave the way for renewable energy projects

- **EXAMPLE:**

Criterion	Qualitative sub-criterion	Reason why this is important
Urban development concept	The urban development concept aims to avoid the creation of heat islands.	Heat islands should be avoided. Heat islands have temperatures up to 5°C higher than the rest of the environment. Passive cooling strategies for buildings such as night ventilation are therefore impossible. The use of cooling appliances becomes more likely. This consumes electricity and heats up the environment even more.

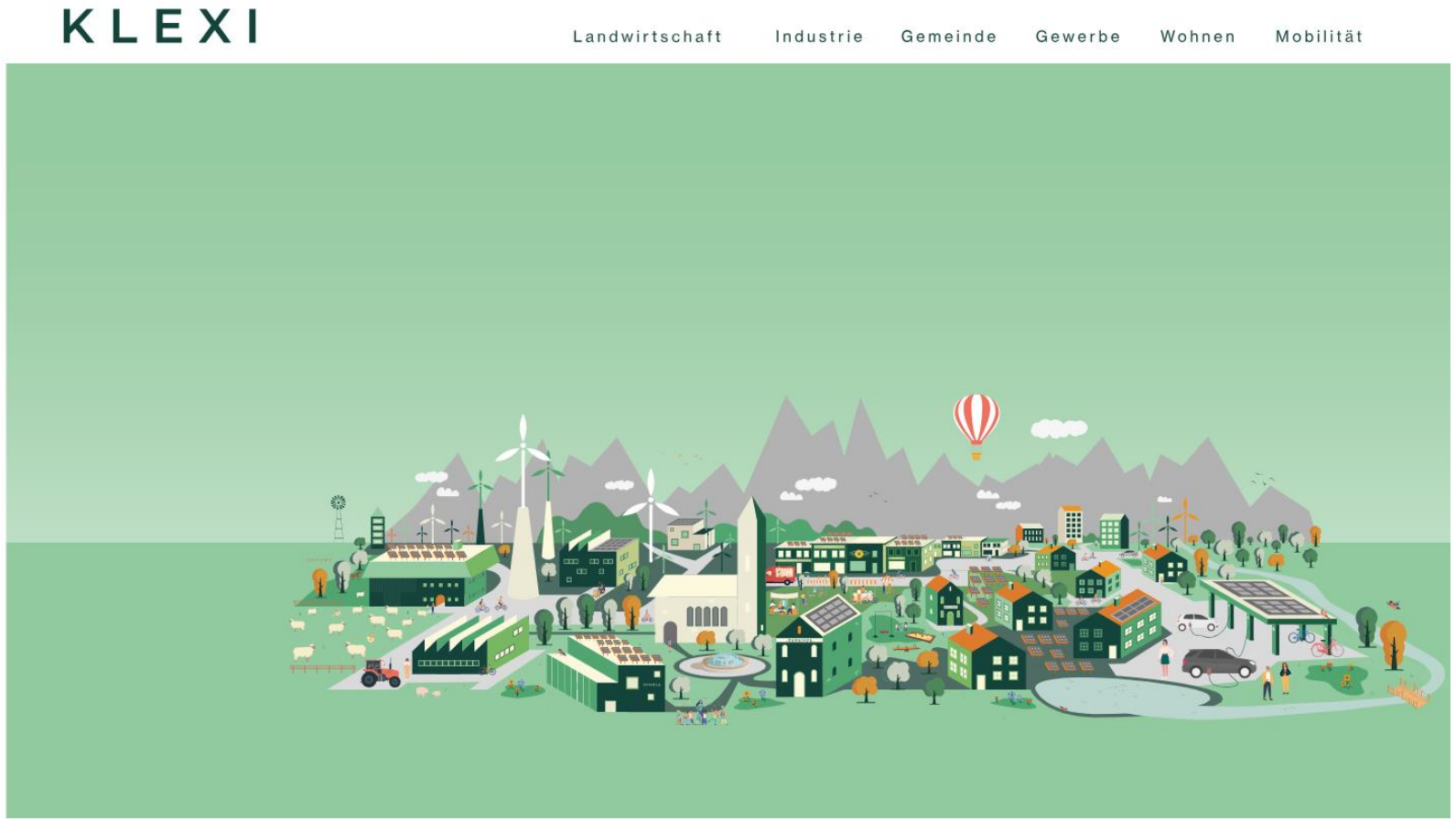
Minimum requirements for managing potential conflicts of interest: The checklist also serves the early identification of trade-offs, and disclosure of information creates transparency and supports acceptance

- **EXAMPLE** for the disclosure of information on renewable energy to the interested public: Presentation of the status quo of renewable energy generation and the possible future renewable energy generation; visualization of the area and type of planned renewable energy sources

Minimum requirements to facilitate NECP planning and reporting: Municipalities to provide access to the data to provincial and federal institutions

- **EXAMPLE:** Access to the development concept in the form of texts and plans, including the measures to be realized over time. In addition, quantitative indicators can be provided as the information listed in the above chapter is structured to be compatible with the indicators of the NECP.

transFORMAT-LINK → LINK-Tool → KLEXI Klimaexpertise, meaning Climate Expert (work in progress)



Login:

Different access levels depending on the role:

- **Role “Content provider/ Editor":** Municipal council, office management, experts: access with password.
- **Role "Interested public":** Citizens, associations: Access without password.
- **Role “Higher-level administration”**, e.g. "NECP reporting": access with password.

Dissemination and publications

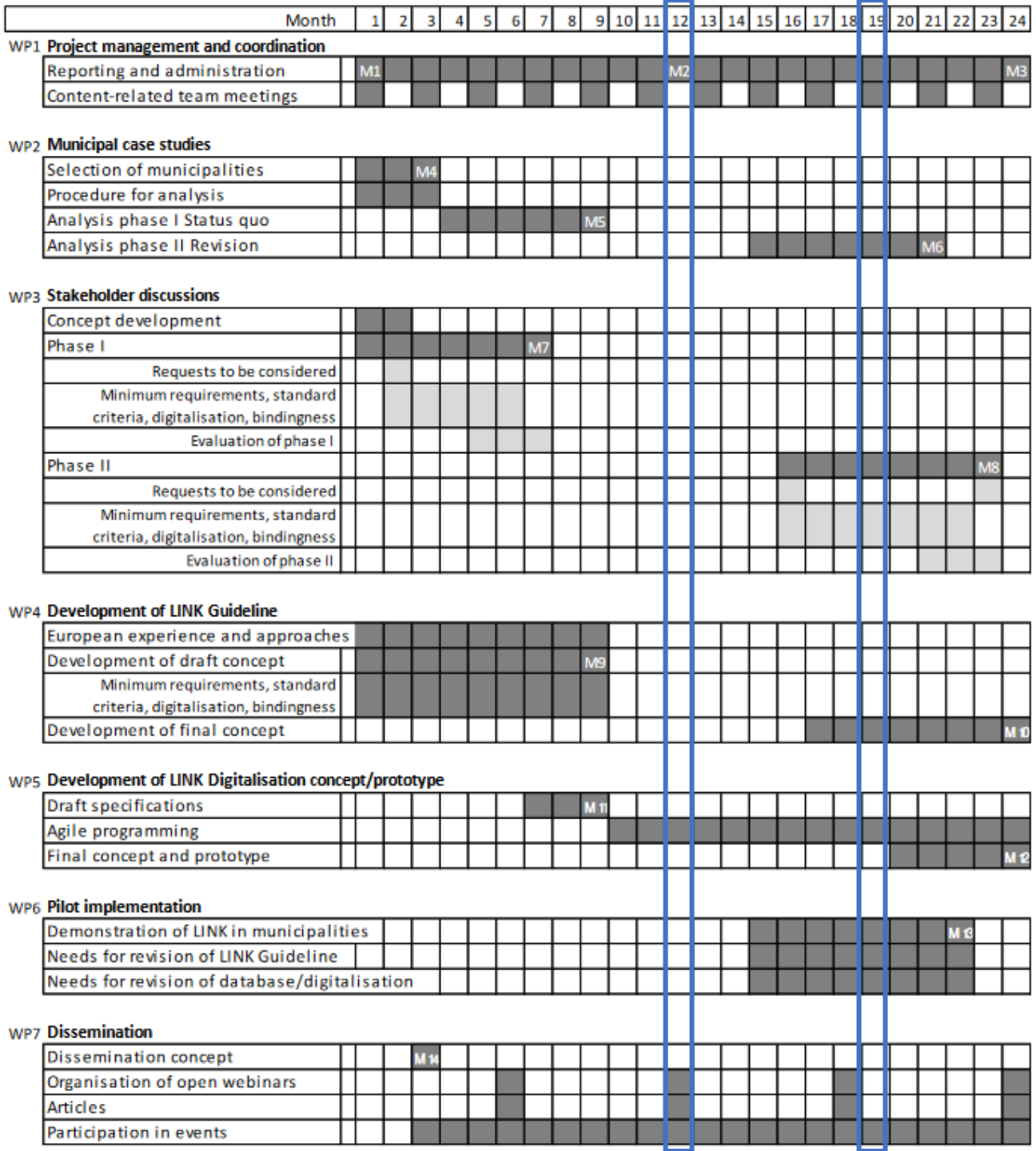
- Project website: https://transformat.at/ and publication on the websites of project partners
- ÖGZ Article: Information for municipalities and invitation to test phase, Österreichische Gemeindezeitung 11/2023, Transformat.at Wie kann die Energiewende gelingen?
- Journal contribution to Europa XXI is in progress, focus on case studies https://europa21.igipz.pan.pl/home.html
- Poster and Paper: ISEC 10-11 April 2024, Graz, focus on renewable energy
- Conference contribution: AESOP 8-12 July 2024, Paris, focus on multi-level governance in relation to NECP (abstract submitted, TU Wien)
- International Webinar together with online workshop la Salle University: 29 April, lead SERA
- National Webinar: June 2024, lead TU Wien

Progress of the project
& Challenges and adaptations during the reporting period

Challenges and adaptations during the reporting period

- More frequent coordination/working meetings than planned were necessary.
- Collaboration with la Salle University in Barcelona established, first workshop took place in presence in Vienna, second workshop planned online.
- Budget shifts, e.g. from travel to dissemination activities because team members use public transport or online meetings, and resources allocated to dissemination in the original workplan were not sufficient.
- Dissemination activities were put off, to focus on results.
- Second round of stakeholder discussions is streamlined, which is possible as we build on the first round.
- In general, the interaction (scheduling meetings, collecting information) with the municipalities and other stakeholders was much more time-consuming than expected and also caused delays.

Progress of the project



Delays with stakeholder discussions and municipal case studies.

Further delays regarding digitalization concept because invited tender with three companies was done.

Prototype is available end of March, and phase II of stakeholder discussions and municipal case studies, and pilot implementation has started.

Despite of challenges and delays, the project will be completed as planned.

SC comments and how they are considered

- Project proposal, comment:

„The SC recognizes the policy relevance of the topic and recommends the project for funding. Please consider to plan for more academic output and the comment of reviewer 2 about reasons for regional diversity."

Reviewer 2: "The societal problem is very clearly stated. The acknowledgement that renewable energy technologies essentially require more land and this may raise conflicts over land is an innovative and sound starting point of the project. The project proposal rightly points at the challenges of subsidiarity in a federal country. This is for not only climate adaptation a valid point, but the tension between national policies and its local implementation becomes very evident. In this respect, the project also has the potential to contribute on the wider debate on multi-level governance (though this thought is not well elaborated in the proposal)."

- Interim report, comment:

"It is understandable that part of the dissemination activities have been postponed to focus on results rather than the concept stage. Since this has already been a recommendation by the reviewers of the original proposal, it would be important to also focus on academic outputs/publications in the second half of the project. With regard to the planned dissemination activities/policy impact: it is good to see that target groups have been identified and key messages are clear. In addition, it would be useful to focus on how exactly the dissemination is planned, e.g. focusing on which concrete actions and formats, and it would be interesting to see what has been learned, e.g. in the stakeholder interviews, regarding potentially successful ways of reaching relevant actors?"

Multi-level governance is dealt with in the conference contribution submitted to AESOP; regarding academic output: see slide 10. Please consider that this project is under "Specific support for policymakers."

Researchers, early adopters: international webinar.
Practitioners in Austria: national webinar.
Relevant actors will be reached by a second round of direct contacts with stakeholders and multipliers and their media (ÖGZ, etc.).

Links and synergies with other ACRP projects (running and closed)

- **GreenAdaptation** - Adaptive capacities and resilience in urban and landscape planning, 01.11.2022 - 30.04.2025, BOKU University https://forschung.boku.ac.at/en/projects/14916. The aim of the project is to develop a set of tools and methods to support Austrian communities in integrating concrete adaptation measures into the spatial development. → provide link through Tool
- **CLIMA-MAP**: Mit Karten gegen die Auswirkungen des Klimawandels (completed 2018): Climate impact maps that clearly illustrate the various already observed and future consequences of climate change (with indicators such as number of heat days, number of tropical nights, etc.) → provide link through Tool
- **TRANSREAL** (completed 2023): Change of framework conditions – with a focus on spatial structures, land consumption and housing. → consider results in development of recommendations

Core team of the project:

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https://www.tuwien.at/en/ar/region: Daniel Youssef, Hartmut Dumke, Elias Grinzinger, Sibylla Zech

https://www.klebothdollnig.com: Andreas Kleboth, Stefan Milenkovic, Gerhard Dollnig, Barbara Ranetbauer

We are happy to answer your questions, contact e-mails can be found on the respective websites.

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