







Dear cross-border colleagues,

Dear friends of sustainability research in the trinational Upper Rhine region,

We are pleased to present you with the first RES-TMO project newsletter.

In this inaugural edition, we are sharing insights from the first year of the RES-TMO project, as well as information regarding upcoming events and project outputs.

Since the project launch in February 2019, some of our highlights include organizing a stakeholder workshop on citizen energy, strengthening the project consortium with the trinational network of energy and climate actors in the Upper Rhine TRION-climate e.V., and holding a high-profile opening event in Freiburg in December of 2019. In this issue, we also introduce the work of three of our seven work packages.

We wish you happy reading!

## The RES-TMO Coordination Team Freiburg





# 1. The project at a glance

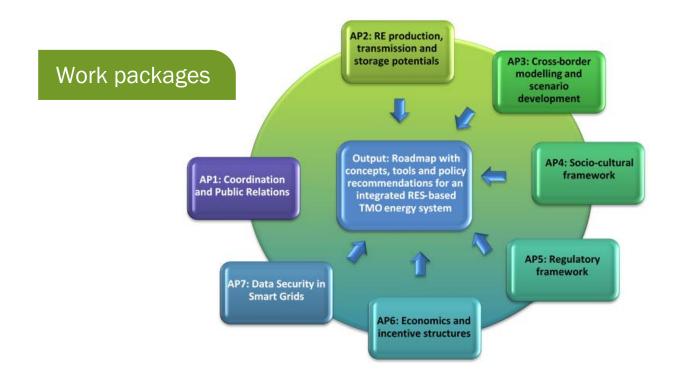
RES-TMO is a three-year project funded through the European Regional Development Fund (ERDF) via the EU programme Interreg V Upper Rhine, as well as seven co-funding project partners. It is implemented by the co-funding and the associated project partners including research institutes, local enterprises, NGOs, public administrations and citizen energy initiatives. It was developed in the framework of the Upper Rhine Cluster for Sustainability Research (URCforSR), a tri-national platform and institution of EUCOR - The European Campus network, which brings together the scientific competence of the Upper Rhine Universities (Strasbourg, Mulhouse, Basel, Karlsruhe, Koblenz-Landau and Freiburg) in the fields of engineering, natural science, economics, law and socio-cultural sustainability research. The project aims to formulate policy advice together with key energy stakeholders, in order to accelerate the energy transition in the Upper Rhine trinational metropolitan region.

To this end, synergies arising from complementary generation, demand and storage capacities, as well as cross-border energy initiatives should be used. RES-TMO investigates the legal, regulatory, political, economic and socio-cultural framework conditions of an integrated, RES -based and cross-border energy system based on regional RES capacities and using cross-border potentials. Detailed information on the project can be found on our website.



## 2. Project updates

The work of the RES-TMO project is organized around seven work packages, or WPs in short. In this issue, we will be updating you on three of these: WP4, which analyzes the socio-cultural framework conditions and ensures the integration of stakeholder perspectives into project results; WP5, which analyzes the regulatory framework and WP6, which focuses its work on the economic framework and incentive structures needed for promoting renewables.



# WP4: Analysis of socio-cultural framework conditions and integration of stakeholder perspectives

#### Project status:

Up until now, WP4 has focused on data collection to ensure a robust empirical basis for the analysis of socio-cultural framework conditions for a RES-based energy system, and for the integration of stakeholder perspectives into the final project outputs. To this end, initial fieldwork has been completed through interviews in France, Germany and Switzerland, as well as focus groups in France with key stakeholders (including our partners the Pôle d'Equilibre Territorial et Rural [PETR] du Pays de Saverne with the Centrales villageoises de Saverne, the PETR de Sélestat Alsace Centrale, the Eurométropole de Strasbourg and the project Zusamme Solar Colmar with Energies Partagées en Alsace and fesa Energie Geno) as well as participant observation. The data gathered thus far is currently being analyzed for initial publications (please see below). The WP4 team at the SAGE laboratory has been strengthened by the arrival of an intern in February 2020, for four months.

#### Collaborations:

The WP4 team collaborates with the coordination (WP1) team (notably on organization of stakeholder workshops), WP5 (on stakeholder workshop 2), WP6 (conducting stakeholder interviews in Germany and Switzerland) and WP7 (interview database).



WP5: Analysis of the regulatory framework

#### Project status:

In order to conduct a legal analysis and impact assessment of the different national support schemes for renewable energy (RE) and related implementation mechanisms in France, Germany and Switzerland, the WP5 team has collected data using various methods, including expert interviews and document review.

Several articles are currently being prepared to disseminate this research (please see below). Topics include the territorial governance of cross-border cooperation in the field of RE and stakeholder interactions at a legal level, and public participation in the development of RE (i.e. tendering mechanisms).

#### Collaborations:

The WP5 team collaborates with the WP4 team on the organization of the second stakeholder workshop, which was initially scheduled for 28 May 2020 in Strasbourg (postponed to October due to the COVID-19 crisis, to be confirmed). This workshop will address the regulatory challenges and opportunities linked to the energy transformation, i.e. development, deployment and upscaling of RE in a cross-border context.



#### Project status:

The WP6 team is analyzing and comparing national policy objectives for the energy sector, based on a detailed and comprehensive description of energy market practices in France, Germany and Switzerland. The collected information will be used for modelling actor behavior, and, at a later time, for economic laboratory experiments. This information will be used to determine the attitude of the population towards a transfer of tasks from public to private hands in the energy market and its post-carbon transition. In this regard, it is important to understand the ability and willingness of private actors to participate in systemic and operational change. This further includes researching the key factors of social acceptance. >>

### Collaborations:

The WP6 team is collaborating with WP4 on the topic of social acceptance of energy participation and reforms. WP6 and WP4 are conducting stakeholder interviews (WP4 for France and WP6 for Germany and Switzerland) based on a joint comprehensive interview guideline. Interviewees are energy utilities, transmission/distribution system operators, politicians, local energy consultants and providers and many more relevant actors.



## 3. TRION-climate joined RES-TMO

TRION-climate e.V. is a non-profit German-French-Swiss network of energy and climate actors in the Upper Rhine. Founded in 2015, it aims to promote environmental protection through cross-border synergy effects in the fields of climate and energy.

TRION-climate seeks to enable the networking of energy and climate actors across the border, to foster the exchange of knowledge and experience, while supporting tri-national data collection, and creating a platform for cross-border projects. The network is managed and supported by local authorities from the Upper Rhine Region, and it has nearly 100 members.

In the RES-TMO project, TRION-climate contributes with its expertise on multiple tasks, notably: the organization of colloquia and a part of the stakeholder workshops in collaboration with the project coordinator; providing support in distributing the newsletter within the TRION network; the brochure for policy-makers summarizing the project results; various publication contributions; and providing substantial inputs from its Trinational Climate and Energy Report for the TMO, published in 2019.







## 4. Stakeholder workshops

On 23 September 2019, the SAGE Laboratory of the University of Strasbourg, the project coordinator and the GECLER Network organized together the first RES-TMO cross-border stakeholder workshop in Strasbourg.

28 representatives from citizen energy initiatives and other organisations from France, Germany and Switzerland took part in the event, where they discussed the challenges and opportunities for development of citizen energy initiatives (such as renewable energy cooperatives) in their respective national contexts as well as in terms of cross-border cooperation. Four speakers gave inspiring input presentations regarding on-going local energy projects in the Upper Rhine region. Participants found the discussions stimulating and feedback was overwhelmingly positive.

For further details on the event, including photos and presentations, please click here.

This was the first in a series of 5 stakeholder workshops. The next one will take place in Strasbourg in October 2020 (tbc), with a focus on governance and regulatory issues.



## 5. Publicly launching RES-TMO

The RES-TMO project celebrated its official opening in Freiburg on 3 December 2019. Organized by TRION-climate e.V. and the coordination team of the University of Freiburg, the event brought together over 130 participants from politics, industry, academia and civil society.

The inspiring presentations and following discussions revealed that no single approach or technology is sufficient to succeed in a regional energy transition, yet three key elements can make a positive change: flexible generation capacities to ensure system balance (e.g. hydropower), multilevel coordination and infrastructure development (e.g. national-regional) and implementing connectivities across different levels (e.g. connection of control areas/regions, market coupling, sector coupling), as well as social innovation to empower citizen energy initiatives and prosumers.

For further details on the event, including photos and presentations, please click here.







# 6. Upcoming publications

WP4: Philippe Hamman, Marie Mangold, « Les coopératives énergétiques, levier de transition écologique? Quelques réflexions comparées France-Allemagne-Suisse-Belgique » [Energy cooperatives, a lever for ecological transition? Comparative reflections France-Germany-Switzerland-Belgium], Revue Etopia, n°14, 2020, pp. 137-174. Online document: download here.

*WP5:* The publication of two book chapters is planned in Schneider/Theobald (Eds.), Recht der Energiewirtschaft, Praxishandbuch C. H. Beck Verlag 5th edition 2020:

§ 2 Vorgaben des europäischen Energierechts

§ 23 Energieumweltrecht: Erneuerbare Energien, Kraft-Wärme-Kopplung, Energieeinsparung

Melis Aras. Article on interconnections (in progress): "Territorial governance of the cross-border renewable energy market: a soluble or turbulent model within the current framework?" (provisional title)

Melis Aras. Article on public participation (in progress): "Public participation in energy transition in the context of the development of RES in the

cross-border sector" (provisional title)

Sophie Gambardella. The European regulatory framework for electricity storage.

J.P. Schneider, Theresa Hüsch. Article on EU governance.

Laurie Nogues, Vincent Dubarle, Lou-Anne Bedaride. Brochure on the legal tools for the implementation of an integrated cross-border renewable energy market in Trinationale Metropolitan Region of the Upper Rhine (TMR) (to be carried out by trainees who will be recruited from 1 April to 31 July 2020).

*WP6:* Dominik Schröder, Bianca Blum, Maximilian Hansmann, Nora Auguste Möller. Potenziale, Chancen und Risiken eines grenzüberschreitenden, nachhaltigen Strommarkts am Beispiel der TMO [Potentials, opportunities and risks of a crossborder, sustainable electricity market using the example of TMO];

Dominik Schröder, Bianca Blum, Viola Nellessen, Martin Schumacher. Reformtheoretische Analyse eines grenzüberschreitenden, nachhaltigen Strommarkts in der Trinationalen Metropolregion Oberrhein (TMO) [Reform-theoretical analysis of a cross-border, sustainable electricity market in the trinational Upper Rhine metropolitan region].



## 7. EU policy updates

The launch of the European Green Deal and the corresponding Investment Plan are certainly two of the most important recent developments for our work. Mid January 2020, the European Commission announced its 1 trillion Euro Investment Plan for Europe to reach emission neutrality by 2050, while also supporting regions depending on coal production to move away from fossil fuels. Around half of the funding will come from the EU budget via various programmes (e.g. the Regional Development Fund, Cohesion Fund, Horizon Europe), while the second half will come from the mobilized public and private co-financing. In this context, as the EU is willing to finance more projects and experimental approaches to developing decentralized, emission-free, renewables-based and regional energy systems, RES-TMO and continuation projects building on it could have highly relevant policy advice to provide.

Through its legislative package "Clean Energy for all Europeans", the European Union aims to transform the EU energy sector towards sustainability and emission neutrality by 2050, cutting greenhouse gas (GHG) emissions in line with the Paris Agreement. The most interesting point for us is the updated renewable energy goal of 32% by 2030 from a 1990 baseline. The EU "cross-border cost allocation", or CBCA, is also one of the key focus elements of our work, as we believe that it has the potential to influence economic incentive structures transnationally. Using the theory of economic policy reform, we aim to provide information and policy advice on this from the viewpoint of energy providers and citizens.

Revised EU directives and regulations adopted in 2019 based on the European Commission's 2016 "Clean Energy for All Europeans" legislative proposal include the following provisions:

- New energy efficiency target 32.5% by 2030 from a 1990 baseline.
- New renewables target 32% by 2030 from a 1990 baseline.

- New interconnection target 15% by 2030 from a 1990 baseline.
- A better governance of the Energy Union.
- More rights for consumers, and in particularly for prosumers.
- A smarter and more efficient electricity market: increase security of supply by integrating RES, managing risks, and improving cross-border cooperation.
- New electricity market design to increase system flexibility and ensure security of supply, e.g. through enhanced dispatch rules, demand response and better coordination of electricity system operations by Transmission System Operators (TSOs) on a regional level.

RES-TMO is also closely following national energy reforms and the transposition processes of EU energy legislation in France and Germany. In France, the full transposition of the "Clean Energy for All Europeans" EU legislation is planned to be completed by November 2020. In Germany, changes to the Renewable Energies Act (EEG) and the Energy Industry Act (EnWG) transposing the EU rules are also expected by November 2020. This and other policy reforms help us to better understand energy policy processes and advise on national and regional policies with the potential to boost transnational energy cooperation.



Concepts for an Integrated, Efficient and Sustainable Energy Supply and Storage in the Upper Rhine Region

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