



Territorial Impact Management – TIM

RURENER



TERRITORIAL IMPACT MANAGEMENT – TIM

RURENER's approach of impact monitoring and assessment of territorial energy strategies

1. Presentation of TIM

The goal of the TIM approach is to **monitor and evaluate the impacts of territorial energy strategies and to respond to the need of rural territories** to assess the social, economic, and organizational progresses that result from their energy transition strategies. The approach helps to:

- **Improve the quality of the actions conducted by the territory:** to know the positive and negative effects of the policies carried out and to manage the different projects accordingly.
- **Communicate data at the local level:** reach local stakeholders (citizens, local representatives...) and reinforce the legitimacy of local energy actions/projects; mobilize new funding for future projects; guide decision-making
- **Communicate at the European level:** showcase local achievements of rural territories for a better recognition of rural areas in European policies that would promote integrated approaches of rural development, taking into account the diversity of rural contexts, and stimulate support for rural energy projects that ensure maximum long-term positive local impacts.

This approach seeks to be transferable to all RURENER territories across Europe for a comparative analysis of strategies and impacts. However, the experimentation cases are located in France and the evaluation methodology is based on the French context and existing tools.

Most territories mainly keep track of results on energy performance data (kWh produced, saved toe, financial report...) but **impacts are rarely evaluated**. In fact, these impacts are very important and drive the definition and the conduct of a local energy strategy (social, economic and environmental impacts). At the European level, it is valuable **to monitor and evaluate the impacts of the different local policies** to facilitate and enlighten the future decisions of European decision-makers. At the local level, impact assessment **informs** territorial stakeholders **on the impacts** of their actions and on how to **adapt** these actions so to **maximize** their positive **impact**.

TIM is structured around **4 main steps** that aim at clearly defining the needs and purposes of the territories doing the monitoring:

1. What do we want to know? (**OBJECTIVES**)
2. Who wants to know it and why? (**MOTIVATIONS**)
3. What allows us to know it? (**MEANS**)
4. How to collect the right information (simple, useful, reliable)? (**IMPLEMENTATION**)

By answering these questions, we can put in perspectives the monitoring evaluation approach and the context in which it will be implemented, which makes the approach both general (shared indicators)

and tailored (data collection, means). This monitoring-evaluation process will be promoted at two scales:

- **Local scale:** to inform on the impacts of territorial actions and policies in the energy sector through a tailored approach
- **European scale:** to disseminate a common approach to all members of the RURENER network and to inform, compare and capitalize on the multiple paths taken by rural areas towards the energy transition

RURENER's approach is based on four macro-indicators:

- **2 economic indicators**
 - o Territorial energy bill, to inform on the money spent in energy consumption (electricity, heat, mobility) and specify which amount leaves the territory (energy imports) and which amount is spent locally (local renewable energy production)
 - o Job creation, to estimate the number of jobs that can be created by following an ambitious energy strategy, also taking into account the possibility of jobs destroyed in the process and later compare the prospective with actual jobs created
- **1 social indicator**, to inform on the citizen's involvement in the energy strategy and the citizen's knowledge of local actions for the energy transition.
- **1 environmental indicator**, that measures the avoided CO₂ emissions thanks to the implementation of local renewable energies.

The main goal of TIM is that after the first year of experimentation during which RURENER will provide its support to adapt locally the approach, territories can easily monitor their impact on a regular basis (every year, every other year...) within their administration. The real added-value of the approach is to inform on the general direction taken by the territory for little efforts from the technicians. Results give a first level of understanding on how to adapt actions to optimize impact. However, TIM does not replace the work done by external consultants which remains necessary to collect detailed information. Every year, RURENER will collect the results of all territories implementing the approach, to compare impacts and communicate a clear and informed message to the European decision-makers.

Methodology

The dissemination of the approach will follow 4 steps:

- 1. Identifying the stakeholders, goals and motivations**
 - Overview of current policies and energy transition actions, and their evolution over time
 - Characterization of stakeholders wishing to implement the approach (public authority, organization, etc)
 - Definition of their motivations and interests in carrying out the monitoring-evaluation approach
 - Definition of the goals of the approach
- 2. Defining the means to achieve these objectives and the relevant information that needs to be collected**
 - Identification of areas of change related to the energy strategy
 - Selection of useful indicators to reach the objectives

- Definition of any additional indicator to complement the approach if relevant
- Identification of the stakeholders in charge of collecting the data, of the method adapted to the territory and choice of the frequency of the collect (according to the capacities, expertise, and existing databases in each territory).

3. Collecting the right information

- Mobilization of the stakeholders in charge of data collection
- Implementation of the approach on the territory and collection of the information

4. Analyzing results

- Presentation of the results in a report to meet the objectives of the approach
- Adaptation of the approach according to the representativeness of the results and the degree of response to the initial objectives
- Comparison with other RURENER territories

If there a territory is at an early stage, still defining its energy strategy, a first analysis of economic vulnerabilities and opportunities is necessary.

2. Economic vulnerabilities and opportunities analysis

The first part of the analysis is a "SWOT" analysis (Strengths, weaknesses, opportunities and threats) of the territory, mobilizing socio-economic data. The second part will be the implementation of the TIM approach.

Diagnosis

The first part of the study targets territories that do not have enough data to measure the indicators (see part 3). The purpose of this diagnosis is to make an analysis of the territory (with the help of a SWOT matrix) in order to understand how energy issues are articulated with the other territorial issues. Indeed, there are convergences and competitions between the different territorial directives and it is important to identify them.

- Territorial diagnosis:
 - o Identify priorities and key issues for the future of the territory
 - o Create a socio-economic-environmental profile of the territory
 - o Identify the available public policies/action levers but also the private/public economic actors
- Energy diagnosis:
 - o Energy profile of the territory: balance of consumption and production of the territory
 - o Energy transition potentials of the territory
- Crossed diagnosis: Energy ↔ Territory
 - o This final part of the diagnosis brings coherence between the needs of the end users (consumption) and the infrastructures and resources on the territory (productions).
 - Synergies between needs / activities / territorial projects
 - Competition / weighing of interests

The SWOT analysis and crossed diagnosis allow us to build projections or scenarios, making it possible to understand, on a long-term vision, the impacts that energy transition policies may have:

- Renewable energy potentials
- Construction of efficient energy sectors integrated into local dynamics
- Identify the stakeholders and resources allocated to the dynamics of change

Finally, we can identify levers for actions for the contributions of the community & public intervention at different scales:

1. National: political vision, long-term strategy → Guiding principles and framework objectives
2. Regional: "energy" intervention axes integrated into territorial policies
3. Local: "operational" public actions, territorial projects, territorial energy strategy

In order to support the dynamics of territorial energy transition, these levers of action are necessary and must be identified. In addition, funding opportunities to put words into actions will be necessary and can already be identified (European, national, regional levels).

3. Tools and measurement methodologies

The approach was experimented in French territories, existing French tools have sometimes been used to inform the 4 indicators. Similar tools will be identified in other European countries or created by RURENER to ensure that all of its members can benefit from the approach. The 4 indicators chosen for TIM are described below.

Economic indicators

❖ *Territorial energy bill*

Objective	Evaluate financial flows related to energy consumption, imports and renewable energy production
Indicator	Territorial energy bill
Unit of measure	Consumed GWh / sector Produced GWh / source
Source of information	Statistical data + Forward work
Evaluation method	. Balancing of all energy consumption versus renewable production . Attribution of a price index for the purchase of energy (consumption) and the creation of wealth (production).
Territorial scale	The entire territory

This tool aims to evaluate, at the local level, the financial flows related to consumed, imported or produced energy from renewable sources. It measures the energy bill paid by the territory and the wealth creation generated by local energy production.

❖ *Job creation*

Objective	Estimate the creation of sustainable jobs linked to the energy transition on the territory
Indicator	Number of jobs created by energy transition policies across the territory
Unit of measure	Number of FTE jobs*
Source of information	Statistical data + Forward work Direct measure

	INSEE
Evaluation method	<ul style="list-style-type: none"> . Evaluation of the quantity of jobs created through the implementation of energy transition policies each year up to 2050 (prospective scenarios) . Accounting for direct and indirect jobs with a correction for destroyed jobs . Reaching out to employers of the territory to map jobs created/maintained related to the energy transition
Territorial scale	The entire territory

* Full-time equivalent

This indicator aims at quantifying the number of jobs associated with the energy transition and the resulting activities in the territory with prospective scenarios up to 2050. It records direct, indirect and destroyed jobs (fossil jobs for example). The tool used is made by French organizations (Réseau Action Climat and Ademe) and can be used at different scale: national, regional, or local.

Direct measure is realized on small territories and will be extended to larger ones through the use of codes characterizing the types of jobs or activity, through the surveys of the National Institute for Statistic and Economic Studies (INSEE).

Social indicator

❖ *Citizen's involvement*

This indicator is the most flexible because every territory has a different scope of needs in terms of communication. For example, one might want to know citizens' understanding of energy policies to communicate with the elected representatives while another one might need to encourage citizens to use the public mechanisms implemented on the territory. Depending on the target, this indicator will be adapted keeping in mind the goal of understanding and mobilizing the synergies between citizens' needs and motivations and the public action and policies.

Environmental indicator

❖ *Avoided GHG emissions*

Computing the avoided emissions means speaking positively of greenhouse gas (GHG) emissions and of the climate in general. Several aspects of territorial policies are concerned by the calculation of avoided emissions:

- Local production of renewable energy
- Transport and mobility
- Energy renovation (indirectly)

Using the local energy mix, we offer to compute how much GHG emissions have been avoided every year. Energy savings are taken into account indirectly, through the comparison from one year to another, if the consumption has decreased, the emissions will automatically decrease while the renewable energy cover increases.