Interreg Europe
European Union | European Regional Development Fund

Sharing solutions for better regional policies

Hanze University of Applied Sciences Groningen

SHREC Interreg Europe

Annex 1 – Action plan template

Part I – General information

Project: SHifting towards Renewable Energy for Transition to Low Carbon Energy (SHREC)

Partner organisation: Hanze University of Applied Sciences

Other partner organisations involved (if relevant):_____

Country: the Netherlands

NUTS2 region: Northern Netherlands

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Part II – Policy context

The Action Plan aims to impact:

- Ξ Investment for Growth and Jobs programme
- □ European Territorial Cooperation programme
- □ Other regional development policy instrument

Name of the policy instrument addressed: RIS3 - EFRO

Part III – Details of the actions envisaged

ACTION 1

1. **The background**

The Policy instrument addressed is the Operational Programme for the Northern Netherlands for the period 2021-2027. Priority axe 1: Innovation.

The main goal of participation in the Operational Programme European Regional Development Fund (OP ERDF), as outlined in the original application, is to improve innovation in the region of North Netherlands through the RSI3 approach of localized innovation. This innovation must be created by coordinating with local businesses, government, knowledge partners and society as a whole (Q4-helix).

From 2014 to 2020 SNN (samenwerkingsverband Noord-Nederland) implemented a research and innovation strategy for smart specialization (RSI3) for the European region of the northern Netherlands. Through cooperation between entrepreneurs, institutes of higher learning, big and small companies, as well as government institutions the Northern Netherlands has made gains to achieve carbon-neutrality by 2050. By utilizing a stakeholder model the SNN utilized existing specialties and incentivized local, bottom-up innovation. With the new RSI3 (2021-2027) the SNN continues and improves upon the created trend of local innovation. The northern region of the Netherlands employs interdisciplinary research institutes, such as the Centre of Expertise - Energy of the Hanze University of Applied Sciences and DNV, giving the region a strong knowledge position to further innovate. Further interactivity through the Regional Energy Strategy will allow for an intensification of innovation in the region North Netherlands. The Regional Energy Strategy (RES) derives from the National Climate Agreement and its objective is to translate the national climate goals into regional programs and projects. The RES is the result of various stakeholder meetings and must be implemented at local level (i.e. the policies of municipalities, provinces or the regional water authorities). One of the major challenges the northern region in the Netherlands is facing, is the lack of capacity on the distribution grids for electricity. Expectations for more development of solar and wind energy sites will increase the demand for energy infrastructure that can cope with this strong growth in renewable energy. It is, however, a necessary development in order to meet the criteria for CO2 production in the urban area. Direct investment in already existing technologies to solve this issue is, ostensibly, not possible within the current framework of the RSI3 approach.

The RSI3 approach pursued by the SNN requires that innovation is the main objective of its plan. Funding seemingly cannot be used for already existing technologies. But, as the issue of energy infrastructure shows, the room for new innovations – in relation to grid capacity and storage capacity – is rapidly shrinking. More grid capacity and energy storage would therefore be desirable, which a more flexible usage of the RSI3 approach might allow for. A flexible posture to the RSI3 approach might ostensibly be against the overall goals of said method, and indeed: if employed against the overall goals of RSI3, that would be the case.

The Northern Netherlands region, however, seems to allow for said adoption of a more flexible approach, whilst remaining true to the spirit of RSI3. The RSI3 approach intends to facilitate smart specialization, by allowing different regions in Europe to utilize their unique strengths and innovate based on those strengths. It is these unique factors for each region that the RSI3 approach focuses on. An important caveat here needs to be made. Whilst the RSI3 indeed focuses on differentiation and innovation, this approach does not do so to the complete detriment of more general infrastructure needed to reach the RSI3 goals. Furthermore, there exists a direct link in this instance between the need for more general infrastructure and innovation: the innovation previously realized in renewable energy production has created the need for storage. Therefore, there is no danger that investing in battery storage will subsume the drive for innovation, considering innovation has created the need for extra capacity within the energy system in the first place. Investing in this context accordingly does not go any further than is necessary to allow innovation to occur. Investing in general infrastructure in the Northern Netherlands remains subservient to the main goal of the SNN, which is to create innovation. Due to the need for more effective grid use and storage, which will facilitate further innovation in the region, the adoption of a more flexible approach regarding innovation is necessary.

2. **Action**

Right before the pandemic, a SHREC project partnership agreement was signed by numerous government organizations and higher education institutions. This agreement has resulted in several insightful (digital) meetings regarding SHREC, where participants presented the implementation of their plans, as well as lessons that can be gleamed from their example. Of these meetings, two presentations in particular stand out as useful examples for the Northern Netherlands situation, namely project “Drive” and the “Slovak battery alliance – energy storage”.

Project Drive was presented by Dr. Nicklas Blomquist from the Mid Sweden University. This project seeks to allow for mass deployment of electric cars, which is currently hamstrung by lack of energy storage capacity. This example shows how an energy network with renewables as the main source of energy can be adapted to allow for further innovation. By developing and innovating on existing batteries, this example shows how the energy grid of the future can cope with the intermittent and environmentally dependent renewable energy sources. In doing so, drive creates the necessary space for electric cars and other appliances to become broadly usable.

The Slovak battery alliance energy storage (SbaA) – presented by Marián Smik – shows how coordination and innovation can achieve new battery storage capabilities, as well as effective utilization of existing battery capacity. Through cooperation between industry and government, the SbaA creates the necessary innovation storage capacity to deal with existing energy grid and storage problems regarding renewable energy, such as: the intermittent production of renewable energy and the problem of strain put on a power grid by peak production times.

These two examples – SbaA in particular – can be used to improve the policy instrument “Operational Programme European Regional Development Fund” period 2021-2027. To facilitate this, we recommend to the SNN team to hold a series of meetings to show to the relevant regional partners how they can achieve what the two examples previously discussed have achieved. The regional partners form the working group “programming” of the EFRO includes government actors from the three northern provinces (Groningen, Drenthe and Friesland) as well as SNN. During these meetings information will be provided on how the subsidizing of existing technology can create the necessary infrastructure for innovation to develop. The focus will be on the practical difficulties for the region regarding implementation, how to avoid these difficulties through the examples of SbaA and Project drive, as well as how the existing policy criteria need to be adjusted to allow for that to happen. These actions will help to improve the policy instrument. By learning from the example of the two best practices the region can learn how (innovative) storage technology can be utilized and developed on a large-scale basis. The aim of these meetings is to convince the participants of the benefits that an adjustment of the criteria can have and that this change occurs in time to be change the current interpretation of the RIS3 program. If successful, that allows SNN to adapt this interpretation in time to alter the policy instrument Operational Programme European Regional Development Fund 2021-2027. Use of existing technology, such as district batteries, allows participants to create the necessary (grid) capacity for innovation to occur. Once this is accomplished, the regional provinces can further advocate with the local municipalities to reconsider certain district energy visions and implement the option of district battery storage.

3. **Players involved** (please indicate the organisations in the region who are involved in the development and implementation of the action and explain their role)
    - Hanze University of Groningen
    - Samenwerkingsverband Noord-Nederland (SNN)
    - Province of Groningen
    - Province of Drenthe
    - Province of Friesland
    - Optional: municipality of Groningen

4. **Timeframe**

July - December 2022 the meetings with the working group Programming of EFRO
January – May 2023 writing sessions in order to formulate the criteria
June 2023 proposal for adjustment send to the relevant parties within the EU, fitting for the upcoming calls following from the new EFRO program.

5. **Costs** (if relevant)

Minimum costs for organizing the meetings, such as catering and location costs.
Estimated at approximately €500 per event.

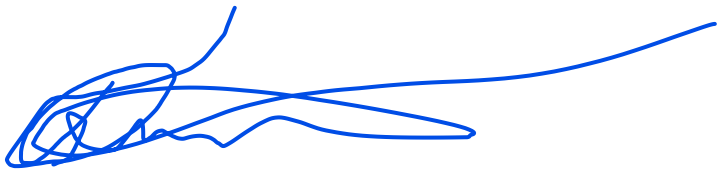
6. **Funding sources** (if relevant):

Date: 23 June 2022

Signature:

Rima Dijkstra

Project leader



Dr. Daisy Tempelman

Leading expert