



LAPIN LIITTO

A just transition to renewable energy in Lapland

Actions for the next ERDF Programming Period

This policy brief is a deliverable of
APPROVE - an Interreg Europe Low-carbon economy project

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INTRODUCTION

The Regional Council of Lapland sees the development of Renewable Energy Sources (RES) as a key part of its strategic priority to create jobs and growth from the smart and sustainable use of its natural resources. The sustainable use of local resources is defined as one of the major axes in the Regional Strategy of Lapland (Lappi-sopimus 2018-2021), Lapland's Smart Specialisation Strategy and Lapland's Arctic Bioeconomy Strategy 2018-2025, which includes a Decentralised Renewable Energy Sources Programme.

The participation in the Interreg Europe APPROVE project has focused the attention on awareness raising, capacity building and stakeholder participation as ways to enable and promote RES, tackling barriers such as: low level of knowledge in the general public, lack of expertise of RES proponents and civil servants dealing with RES projects and permitting procedures, issues of public opposition within approval procedures.

APPROVE aims at improving the renewable energy policies in four different European regions (besides Lapland, Epirus in Greece, Normandy in France, Castilla y León in Spain). Through **interregional cooperation** and involvement of regional stakeholder groups, the four partners' regional authorities have shared and transferred experiences and knowledge to improve their policies. As a final goal, the lessons learnt from the interregional cooperation have been used by each regional authority to define an **action plan** focused on the improvement of their Structural Funds Operational Programmes, considering investment priorities related to TO4 "Supporting the shift towards a low-carbon economy in all sectors".

Lapland, the **regional stakeholder** group meetings of the project have evolved around the needs of the various stakeholders currently working on ERDF-funded projects on RES around the region. Many ongoing projects around the region have been focusing on biogas and the work has been beneficial in reducing overlapping work and improving the knowledge of stakeholders. The regional stakeholder group has been supporting the Regional Council of Lapland in the design of the actions, which take inspiration especially from two cases gathered from the APPROVE partners (Regional Council of Normandy and EREN) during the project.

Key stakeholders in the work are representatives from:

- ✓ **Lapland's energy educational establishments** (Lapland Education Centre REDU, Lappia vocational college, Lapland University of Applied Sciences)
- ✓ **The regional state administrative agency:** Centre for Economic Development, Transport and the Environment
- ✓ **ProAgria Lapland**, which organises the work of the Arctic Smart Rural Communities Cluster that gathers regional actors working on rural development

LAPLAND'S APPROVE ACTION PLAN

Reducing the regional carbon intensity and increasing the use of local renewable energy sources are the key pillars of Lapland's strategy to develop its approach to support its energy transition. Lapland's regional Action Plan contains two actions that will attempt to contribute to two key themes of the APPROVE project: improving the capacity of local actors to make informed choices in

the field of energy through capacity building and stakeholder participation, as well as developing new ways of organising the work between public and private structures.

The focus of the actions revolves around the question of increasing the take-up of local RES investments in the field of **heating**. Heating is

the largest single source of CO2 emissions in the region, it is the sector that has the largest potential to increase its already high share of RES in the energy mix and it is a key competence for

municipalities (through heating of public buildings and controlling majority shares in local districts' heating companies).

Energy sources for district heating

In Finland the future of peat as a source of energy has a special importance. Until recently, peat was the energy source for nearly half of Lapland's current district heating, though it is fast decreasing. Investments to replace energy peat use and production in district heating are urgently needed in order to protect the security of supply. Forest biomass are widely used while there is a need for further research on how forest biomasses are utilized and circulated. Increasing the use of wood energy in the area should help to make better use of the raw material potential, for example through various by-products and recycling (eg. pelletizing plants using the by-products of the sawmill industry). Also biogas plants utilizing agricultural and municipal waste allow for a diversification in the production of district heating. Moreover, solutions such as geothermal or district heating plant-sized heat pumps can help enable Lapland's energy system to meet the needs of the coming decades.

Reducing the use of energy peat will cause an economic decline in different sectors in Lapland. The transition creates economic, social and environmental impacts that affect different groups in different ways and are strongly distributed in the region. The use of peat focuses on agglomerations and their economic impact on important consumers, businesses and municipalities. The effects of the reduction in peat production are developing for peat and logistics entrepreneurs as well as employees in the sector. Peat production is geographically established in the rural municipalities of the Southern parts of Lapland, where the majority of Lapland's peat production areas are located, and in useful SMEs in South-western Lapland. Peat production municipalities in Lapland are Simo (13 production areas), Tornio (8), Ranua (6), Tervola (5), Rovaniemi (5), Kemijärvi (2), Sodankylä (2), Kolari (1), Kittilä (1), Posio (1) and Ylitornio (1). In addition to the individual municipalities, the challenges are also reflected at the provincial level.

The two actions proposed by the Regional Council of Lapland and its stakeholders within the APPROVE Action Plan and in part inspired by good practices from other participating regions of the project are:

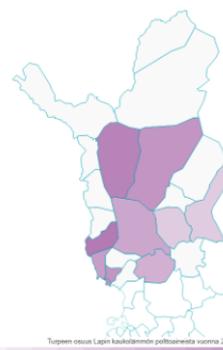
1) Creation of a **monitoring system** for the region's district heating plants, mapping their **energy sources and climate impact** at the municipal level. Information are visualised, shared and discussed online as well as in workshops to be organised throughout the process together with municipalities and other key stakeholders. The monitoring will feed into the development of the region's Just Transition Plan, which will be used to fund projects in the new ERDF programming period.

2) Promotion of **public-private co-development and innovative public procurement** to develop platforms and innovative products, services and solutions for the heating sector. In particular, the Regional Council of Lapland participated with comments on this matter in the pre-consultation process for the ERDF Finnish 2021-2027 Operational Programme. Some of the proposals were included in the final draft, sent for consultation by the Ministry of Economic Affairs and Employment.

Turpeen osuus Lapin kaukolämmön polttoaineista (2019)

Aikkulan aluelämpö (Ylitornio)	74,67 %
Kittilän Aluelämpö	69,38 %
Sodankylän Lämpö ja Vesi	59,5 %
Kemijoen Energia ja Vesi	59,01 %
Kamen Energia	58,56 %
Tornion Voima & Tornion Energia	51,65 %
Näppesjärven Energia ja Vesi (Rovaniemi)	48,02 %
Ränkäsen Irtte	42,7 %
Sallan aluelämpö	28,04 %
Kemijärven Kaukolämpö	25,98 %
Adven Levi (Kittilä)	8,03 %
Energia (Inari)	2,97 %
Savukosken Lämpö	0,80 %
Kolari Lämpö	0,00 %
Posion Vesi ja Lämpö	0,00 %
Yhteensä	43,3 %

Lähde: Energiateollisuus - Kustannustiedot 2019, Kustalle. *Tieto perustuu lämpömittaukseen vuodelta 2019



Turpeen osuus Lapin kaukolämmön polttoaineista vuonna 2019 (%)

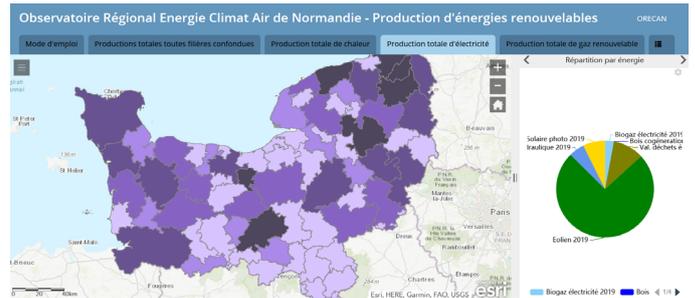
RECOMMENDATIONS

Based on the interregional knowledge exchange within the APPROVE project, the following recommendations are given to Lapland's stakeholders in order to **foster renewable energy and its acceptance regionally**.

#1 Stakeholders should consider the European Union's Just Transition Mechanism (JTM) and especially its Just Transition Fund (JTF).

#2 It is valuable to use and further develop the monitoring system for the region's district heating plants, mapping their energy sources and climate impact. A good practice that can be taken as an inspiration is ORECAN, the Normandy Regional Observatory for Energy, Climate and Air.

#3 In order to reach effective and concrete actions in the new ERDF programming period, policy actions should be defined in the framework or in synergy with the focus areas under the Carbon Neutral Finland priority of the ERDF 2021-2027 Finnish Operational Programme, and in particular:



Specific objective: 2.1 Fostering energy efficiency measures and reducing greenhouse gas emissions: Improving energy and material efficiency in the public sector and enhancing the measurement of regional greenhouse gas emissions

Specific objective: 2.2 Fostering renewable energy: Promoting public-private co-development and innovative public procurement to support the development of renewable energy production facilities and hybrid production systems and platforms

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