

## INNOEnergy: Concepts for digital data processing to increase energy efficiency in agriculture

### Riferimenti

Tipo di progetto

Gruppo Operativo

Acronimo

INNOEnergie

Tematica

Energia

Information

Time frame

2020 - 2022

Durata

25 months

Partners (no.)

9

Regione

Provincia autonoma di Bolzano

Comparto

Multifiliera

Localizzazione

ITH10 - Bolzano/Bozen

Costo totale

€321.100,00

Fonte di finanziamento principale

Programma di sviluppo rurale

Programma di sviluppo rurale

2014IT06RDRP002: Italy - Rural Development

Programme (Regional) - Bolzano

Parole chiave

Energy management

Farming practice

Project status

completed



### Objectives

Increase energy efficiency and the associated economic efficiency on agricultural holdings in the most important sectors (fruit-growing, viticulture and mountain farming) of primary production in South Tyrol;

Conception of digitally supported advisory approaches for all agricultural enterprises;

Development of information and knowledge transfer materials in the form of fact sheets, videos, sample calculations etc. to sensitise agricultural enterprises to energy efficiency measures (renewable energies, innovative technologies, energy efficiency...).

### Activities

The project INNOEnergie lays the basis for an increase in energy efficiency and environmental protection in the primary production of South Tyrolean agriculture. For this purpose, a specification sheet for a digital consulting concept will be drawn up and information material will be prepared.

The project is based on five work packages:

- Project management
- Communication & dissemination of results
- Needs analysis, data collection & creation of a specification sheet
- Development of a requirement specification & theoretical validation
- Development of concepts to increase the energy efficiency and sustainability of agricultural enterprises

### Context

South Tyrol's farmers are very interested in energy and energy efficiency. This is confirmed by a survey conducted by the South Tyrolean Farmers' Association among its members in 2017.

Farmers were asked about various topics such as boilers, photovoltaics and

## Concetti energetici per l'elaborazione digitale dei dati per aumentare l'efficienza energetica in agricoltura

2/4

<https://www.innovarurale.it/pei-agri/gruppi-operativi/bancadati-go-pei/concetti-energetici-laborazione-digitale-dei-dati>

e-mobility. The survey clearly shows that farmers strive for optimisation in the energy sector, but often do not implement it. It could be deduced that the lack of information is a major obstacle in the implementation of innovations.

The INNOEnergie project offers customised information on energy efficiency and cost-effectiveness in primary production through an innovative consulting approach.

In addition, a trend towards digitalisation can also be seen in consulting services. This has emerged from the experience of the Innovation & Energy department in recent years.

### Partenariato

Role	Azienda	Address	Telephone	E-mail
Leader	Südtiroler Bauernbund	K.-M.-Gamper-Straße 5 39100 Bolzano BZ Italy	0471 999363	innovation-energie@sbb.it
Partner	Europäische Akademie Bozen	Drususallee, 1 39100 Bolzano BZ Italy		
Partner	Landeskammer für Land- und Forstwirtschaft in Steiermark	Hamerlinggasse, 3 Graz Austria		
Partner	Syneco Group	Marie-Curie-Straße 17 39100 Bolzano BZ Italy		
Partner	SEV DATA Genossenschaft	Giuseppe Di Vittorio Str. 16 39100 Bolzano BZ Italy		
Partner	Franz Nussbaumer	Steet 15 39058 Sarnthein BZ Italy		

Role	Azienda	Address	Telephone	E-mail
Partner	Thomas Lun	Finkweg 12 39012 Meran BZ Italy		
Partner	Oskar Matthias Ausserer	Freitenweg 7 39020 Tschars BZ Italy		
Partner	Joachim Aschbacher	Aussermühlwald 166 39030 Mühlwald BZ Italy		

## Pratiche abstract

### Description

#### Consulting approach

The goal of the project is the theoretical conception of a digital consulting tool - digitally location-independent personalized. The use of digital applications for the generation of automated, individual recommendations represents a novel approach. The consulting is done online by processing existing and queried data. Based on this, farmers are recommended individual measures to increase energy efficiency for their farms. The person seeking advice can make use of the "advice" regardless of location. This is expected to have a very large reach. The project lays the foundation for this innovative advisory methodology, which could also be transferred to other agricultural advisory services.

To date, there are no comparable offers that address the fruit growing, viticulture and mountain farming sectors. Within the framework of this project, all prerequisites and conditions for the implementation of the digital consulting tool are to be created and elaborated in the form of a specification sheet.

The consulting approach is based on the use of digital tools. Relevant data, which are fed into the digital advisory tool or queried by the farmer, are automatically processed and assigned to clusters. Farmers are then given recommendations on how to increase energy efficiency and environmental protection. These are reinforced by brief information and further information material.

### Description

#### Contents

Energy-saving concepts for small-scale agricultural enterprises and measures to increase energy efficiency not only have a positive effect on the environment, but also on the profitability of a business. Changes in operating procedures or investments can have a significant impact on a farm's energy balance. The objective of this project is to develop solutions, concepts, measures and information materials for increasing energy efficiency on farms. Based on research and cooperation with various consultants, measures and, for the first time, a data pool will be developed to bundle existing information on energy efficiency in agriculture.

The contents to be developed can be roughly assigned to three areas:

- Use of machinery/internal and external mechanisation/mobility
- building services engineering
- power generation

These thematic areas will be filled with targeted measures for fruit-growing, viticulture and mountain farming.

### Description

#### Multi Actor Approach

Aufgrund der Beteiligung der LandwirtInnen an der Projektgruppe und der Durchführung von Energiechecks auf landwirtschaftlichen Betrieben stellt der Multi-Actor Approach ein integrales Element im Projekt dar. Die Bedürfnisse im Bereich Energie werden direkt auf Betrieben der Sektoren Obst- und Weinbau so-wie Berglandwirtschaft erhoben. Die interdisziplinäre Projektgruppe erarbeitet auf Basis dieser Erhebungen maßgeschneiderte Empfehlungen zur Steigerung der Energieeffizienz der einzelnen Sektoren. Durch die direkte Kooperation zwischen Forschung und Praxis liegt der Fokus auf zielgruppenrelevanten Inhalten, wodurch die Akzeptanz und der Erfolg des Projekts maximiert werden.

---