Intelligent Bioenergy Network s.r.l. – iBioNet s.r.l.

ROSE WOOD
4.0 Sustainable Wood for Europe

iBioNet (Intelligent Bioenergy Network) is a spin-off of the University of Florence, established in 2015.

iBioNet supports the local communities through the development of renewable energies and guarantees the environmental and social sustainability. Furthermore, iBioNet promotes wood-energy supply chains, assists the enterprises and the local communities. iBioNet supports the energy production togheter with the maintenance strategy into the local framework. iBioNet promotes the biomass energy to reduce the GHG emissions and as drive force for the rural economy and forest management.

iBioNet pays particular attention to the growth of a sustainable economic model, compatible with the economic and ethical development of local companies, thanks to the coherence between the core business of "renewable companies", based on principles of environmental sustainability and efficient use of resources.

iBioNet's services are:

• Planning and design of biomass supply chains, through specific analyses and the development of web applications that allow an assessment of the sustainability of the new energy plants.

• Biofuel Certification Service and emissions analyses aimed at certifying the quality of solid fuels (wood chips). In particular, iBioNet issues quality certification of solid biomass samples, according to the UNI EN ISO standard.

• iBioNet also produces and installs SensorWebEnergy (SWE) and Air Quality (AIRQ) remote monitoring systems and able to determine: the first the quantity

and quality of biomass supplied to the plants; the energy eventually produced; the overall performance of the plant, weighed against climatic and electricity consumption data; whereas the second, weather data and emission value data of CO2; CO; NO2; VOC; PM10; PM2.5 . SWE and AIRQ data are sent in real time to the web platform (www.ibionet.eu) to be processed and made immediately available to the users.

DETAILS

ORIGIN OF WOOD

Forest

TYPE OF WOOD

Stemwood

KIND OF WOOD CONCERNED

Stemwood, woodchips and micro woodchips

IMPACT ON ENVIRONMENT & BIODIVERSITY

low environmental impact and increasing forest biodiversity

INCOME EFFECT

possibility increase income to local emprises with sale of certifical biomass

EXPLOITATION POTENTIAL

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HUB

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ECONOMIC IMPACT

creation of local wood-energy chains

SPECIFIC KNOWLEDGE NEEDED

MOBILIZATION POTENTIAL

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SUSTAINABILITY POTENTIAL - VALUE

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EASE OF IMPLEMENTATION

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EASE OF IMPLEMENTATION - EVALUATION

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KEY PREREQUISITES

Forest management and planning, forest communities, wood-energy supply chains, biofuel certification service, biomass plant emissions analyses (efficiency monitoring biomass plant)

TYPE OF EVENT WHERE THIS BPI HAS BEEN FEATURED

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JOB EFFECT

possibility of new jobs in the wood supply chains

COSTS OF IMPLEMENTATION (EURO - €)

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good practices for sustainable forest management, good knowledge of wood supply chain, wood fuel market trend, knowledge ISO 17225 norm

MORE DETAILS

CHALLENGE ADDRESSED

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DOMAIN

Forest management, ecosystem, resilience

Wood energy industry

Innovation management, hubs, clusters

TYPE OF SOLUTION

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KEYWORDS

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DIGITAL SOLUTION

No

INNOVATION

Yes

COUNTRY OF ORIGIN

Italy

SCALE OF APPLICATION

National

START AND END YEAR

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CONTACT DATA

OWNER OR AUTHOR

REPORTER

info@ibionet.eu

REFERENCES
AND RESOURCES

MAIN WEBSITE

http://www.ibionet.eu

RESOURCES

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PROJECT WEBSITE

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PROJECT REFERENCE

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PROJECT UNDER WHICH THIS FACTSHEET HAS BEEN CREATED

Rosewood

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY