



S2Biom Newsletter - Issue 6 January 2017

The S2Biom project

The S2Biom project - Delivery of sustainable supply of non-food biomass to support a “resource-efficient” Bioeconomy in Europe - supports the sustainable delivery of non-food biomass feedstock at local, regional and pan European level through developing strategies, and roadmaps that will be informed by a “computerized and easy to use” toolset (and respective databases) with updated harmonized datasets at local, regional, national and pan European level for EU28, Western Balkans, Moldova, Turkey and Ukraine.

The project started in September 2013 and have finished end of November 2016. Further information about the project and the partners involved are available under www.s2biom.eu



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This Newsletter

This is the final newsletter of the S2Biom project. All project activities have been finalized until the end of November, 2016 and in the following months – extensive reporting work have been implemented by S2Biom project partners to summarize and publish all relevant S2Biom project outcomes.

This final issue of the newsletter informs about the main results from S2Biom project and about the final conference of the S2Biom project organized in Bratislava, Slovakia at end November, 2016. If you would like to receive additional information please email: ilze.dzene@wip-munich.de.

Complete S2Biom project results are available!

S2Biom Toolset

The **S2Biom project** has developed a sophisticated but still user friendly **computerised toolset** which is intended to aid research, industry and policy makers in their work. This service is free of charge and open to everyone. S2Biom toolset and the respective data sets cover information and data for EU28, Western Balkans, Moldova, Turkey and Ukraine.

S2Biom provides data on the following types of lignocellulosic biomass:

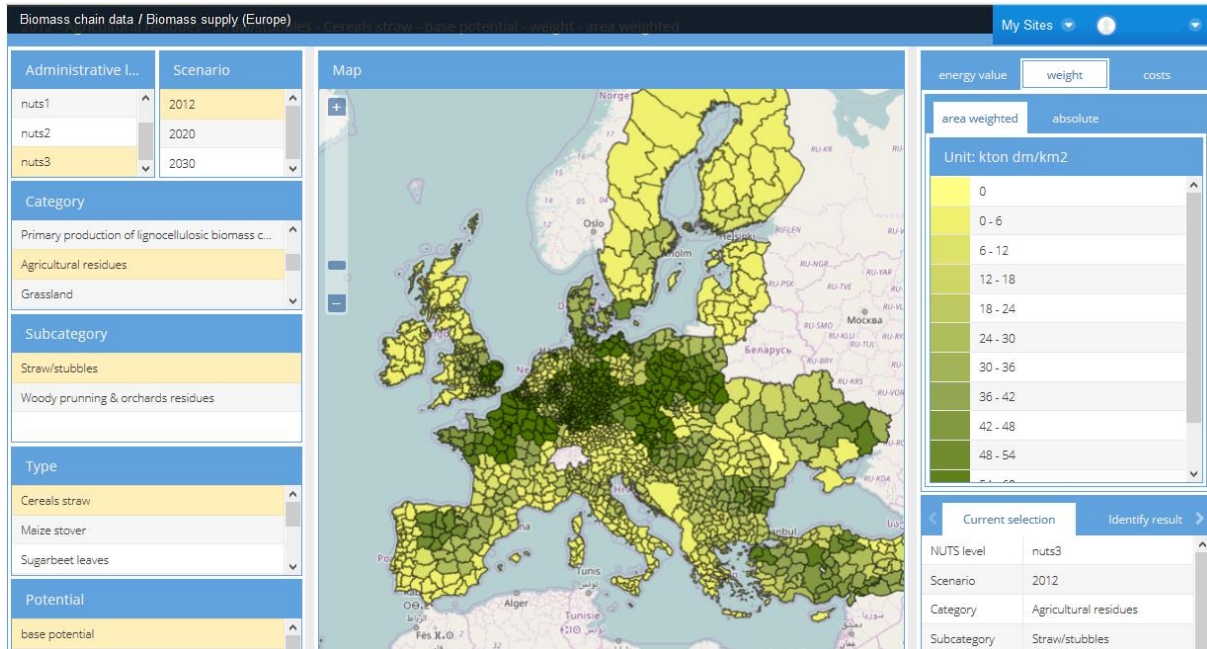
- Forest biomass from primary forestry production
- Forest industry residues
- Agricultural biomass from primary field activities
- Dedicated perennial crops
- Agro-industrial residues
- Biowaste and post-consumer wood

The toolset consists of several tools, which can be used by researchers, policy makers, regional and

development planners as well as biomass project developers and investors involved in the whole lignocellulosic biomass supply chain.

Check out the S2Biom tools at www.biomass-tools.eu !

The Biomass Supply and Cost Tool



The tool can be used to find out:

- Where is biomass found?
- What is sustainable potential of biomass for 2012, 2020 and 2030?
- Which biomass and how much is available in your region?
- How much does it cost?

Biomass supply and cost information is spatially detailed up to regional (**NUTS3**) level.

Detailed information per country can also be downloaded in the form of excel sheets. For this open the tab 'Data downloads' (in the main menu).

The Biomass and Technology Matching Tool 'Bio2Match'

The tool can be used to find out:

- Which conversion pathways are appropriate for biomass in your region?
- Is there a need for biomass pre-treatment?

'Bio2Match' works using the database of biomass properties and the database of conversion technologies. Both databases can be used independently as comprehensive information sources. They contain data about typical properties of various biomass types and **factsheets of more than 50 conversion technologies**.

Tools / Bio2Match My Sites

Select rows and columns

Switch rows and columns

Columns - Bio...

- Production...
- Primary res...
- Primary pr...
- Agricultural...
- Grassland
- Other land ...
- Secondary ...
- Secondary ...
- Municipal ...
- Waste fro...

Rows - Convers...

- Syngas plat...
- Gasificatio...
- Direct com...
- Aneerobic ...
- Biochemic...
- Torrefaction
- Treatment ...
- Fast pyroly...

Match

Name	Cereals straw	Maize stover	Unused grassland cutti...
Complete mix digester state of the ar...	✓	✓	✓
Bubbling fluidised bed combustion fo...	✗	✗	✗
Circulating fluidised bed combustion ...	✗	✓	✗
Grate boiler with wood chips for heat...	✗	✗	✗
Grate boiler with wood chips for CHP ...	✗	✗	✗
Co-firing in PC (31)	✗	✓	✗
Grate fired waste incinerator (32)	✗	✓	✗
Pellet boiler for heat (33)	✗	✗	✗
Batch stove for heat (34)	✗	✗	✗
Dry Batch Digestion (MSW) (35)	✓	✓	✓
Grate boiler with agrobiomass for CH...	✓	✓	✓
Grate boiler with straw for heat (75)	✓	✓	✓

Matching overview for biomass type "Cereals straw" and conversion "Pellet boiler for heat (33)"

Name	Group	Match
Ash content	Thermal conversion	Physical match: ✗
Ash melting behavior (DT)	Thermal conversion	Fundamental match: ✗
Bulk density, BD	Physical treatment	Physical match: ✓
Chlorine content	Thermal conversion	Physical match: ✗
Moisture content	Physical treatment	Physical match: ✓
Nitrogen content	Thermal conversion	Physical match: ✓

Matching chara...

- Anaerobic ...
- Biochemica...
- Physical tre...
- Thermal co...

Product groups

- electricity
- biofuels and biobase...
- heat

Regions

Legend


- ✓ Physical match
- ⚠ Fundamental match...
- ✗ No match
- ⊖ Not taken into consi...
- 🔗 Missing data

The Biomass Policy Tool

About S2BIOM Catalogue of Instruments & Measures

Search Instruments & Measures by information fields

Search here in a targeted way for Instruments & Measures that foster the development of regional bioeconomies. You can filter your search based on a set of differentiating information fields. For each Instrument & Measure a detailed factsheet will be provided. [Some examples of how the tool can be used.](#)



Country/Region

European Union

- None -

Type of Instrument or Measure

Regulatory (binding) instruments

- None -

Sector/Topic targeted

- Any -

Feedstock type targeted

- None -

- None -
- Agriculture/Horticulture
- Aqua/Marine/Fishing (including algae)
- Forestry
- Industry byproducts
- Landscape care
- Waste

Advanced options

Year Started

Is equal to

The tool can be used to find out:

- Which policies are used in individual countries to support biomass use for energy and the bio-based economy?
- What policies are used in other countries and are the best practice examples?

The policy tool works based on the database which contains information about more than 660 policy instruments and measures. Detailed information is also available in the form of factsheets which can be downloaded from the toolset in the tab 'Data downloads' (in the main menu).

S2Biom logistic planning tools

'BeWhere' Tool: is used to identify optimal locations of biomass conversion plants in any particular region. BeWhere provides optimal selection of technology, location and capacity of bio-energy production plants, based on the minimization of the costs and emissions of the whole supply chain, in order to meet a pre-defined energy demand competing against the actual fossil fuel energy commodities. The model keeps track of the costs, the emissions of each segment of the supply chain, the total bio-energy and biomaterial demand and avoided emissions.

'LocaGistics' Tool: is used to design and evaluate optimal biomass logistic chains at a local level.

Output from BeWhere can be used as input for further analysis and more precise chain design and evaluation in the LocAGistics tool.

Applications of the logistic planning tools are presented in S2Biom project case studies in Burgundy (France), Aragon (Spain) and Central Finland.

www.biomass-tools.eu

Other outcomes of the S2Biom project

If you are interested in **sustainability aspects** of the non-food biomass supply chains, have a look at:

- Summary report on how sustainability aspects of introduction bioeconomy value chains are currently considered
- Sustainability Criteria & indicators

If you are interested in **biomass policies**, have a look at:

- Policy database - regulatory and economic frameworks on EU and national level
- Report on benchmarking of country policy approaches
- Policy options to mobilize sustainable non-food biomass resources for the biobased economy
- Synergies and cooperation for biobased economy in Europe and at international level

If you are interested in **the state-of-the-art and future outlook** for non-food biomass and biobased economy, have a look at:

- Market analysis for lignocellulosic biomass as feedstock for bioenergy, biobased chemicals & materials in Europe
- Overview report on the current status of biomass for bioenergy, biofuels and biomaterials in EU, Western Balkans, Ukraine, Turkey and Moldova
- Vision for 1 billion dry tonnes lignocellulosic biomass as a contribution to biobased economy by 2030 in Europe

Concise summary of S2Biom relevant outcomes is also summarized in **Policy Briefs**:

- New supply and demand data on biomass use for energy, fuels and organic chemicals in Europe
- Vision for 1 billion tonnes of dry lignocellulosic biomass for the biobased economy in 2030
- Long term strategies for lignocellulosic biomass in Europe
- Market analysis for biobased products
- Biomass potentials in the S2Biom project

S2Biom results include also **national roadmaps for lignocellulosic biomass and relevant policies for a bio-based economy in 2030** for all EU-28 countries, Western Balkans, Moldova, Turkey and Ukraine. Check out what results and recommendations are made for your country!

Full list of S2Biom reports and publications is available [HERE!](#)

S2Biom events

S2Biom Final Conference

On 30th of November, 2016 the final S2Biom dissemination workshop has been organised in Bratislava, Slovakia. The workshop was a part of the joint event “Biomass for growth: potentials and challenges of bioenergy in the Danube Region” and took place at the DOUBLE TREE by Hilton Hotel in Bratislava, Slovakia. The workshop was one of the side events of 'SET Plan – Central European Energy Conference X' and was organised in cooperation between Danube – INCO.NET and S2Biom projects.



During the workshop the main outcomes of the S2Biom project have been presented, including demonstration of integrated tools, results of the S2Biom case studies, as well biomass assessment and policy roadmap for the Danube region countries.

Presentations of the conference are published on the S2Biom website.

S2Biom Consortium

Project coordinator



Scientific Coordinator



Project partners

