S2Biom.eu

OVERVIEW OF S2BIOM TOOL BOX

Workshop Delivery of sustainable supply of non-food biomass to support a 'resource-efficient' bioeconomy in Europe

Amsterdam, 9 June 2016

Amsterdam

S2BIOM –Workshop Delivery of sustainable supply of non-food biomass to support a 'resource-efficient'bioeconomy in Europe

9 June 2016

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Task 4.7: General User Interface

Help | Scenarios | Supply | Cost | Logistics | Pre-treatment | National full chain assessments | Regional full chain assessments | Demand | Conversion pathways | Roadmaps

External data/tools on biomass supply and cost following GMES aproach (1.1)

Biomass cost-supply

Data viewer, download & analysis (4.1)

Full chain assessments

Tool for Integrated and optimal biomass delivery chain network design and evaluation at national and European level (4.4)

Tool for integrated and optimal design and evaluation of regional biomass delivery chains (4.5)

Biomass demand, pre-treatment and conversion technologies

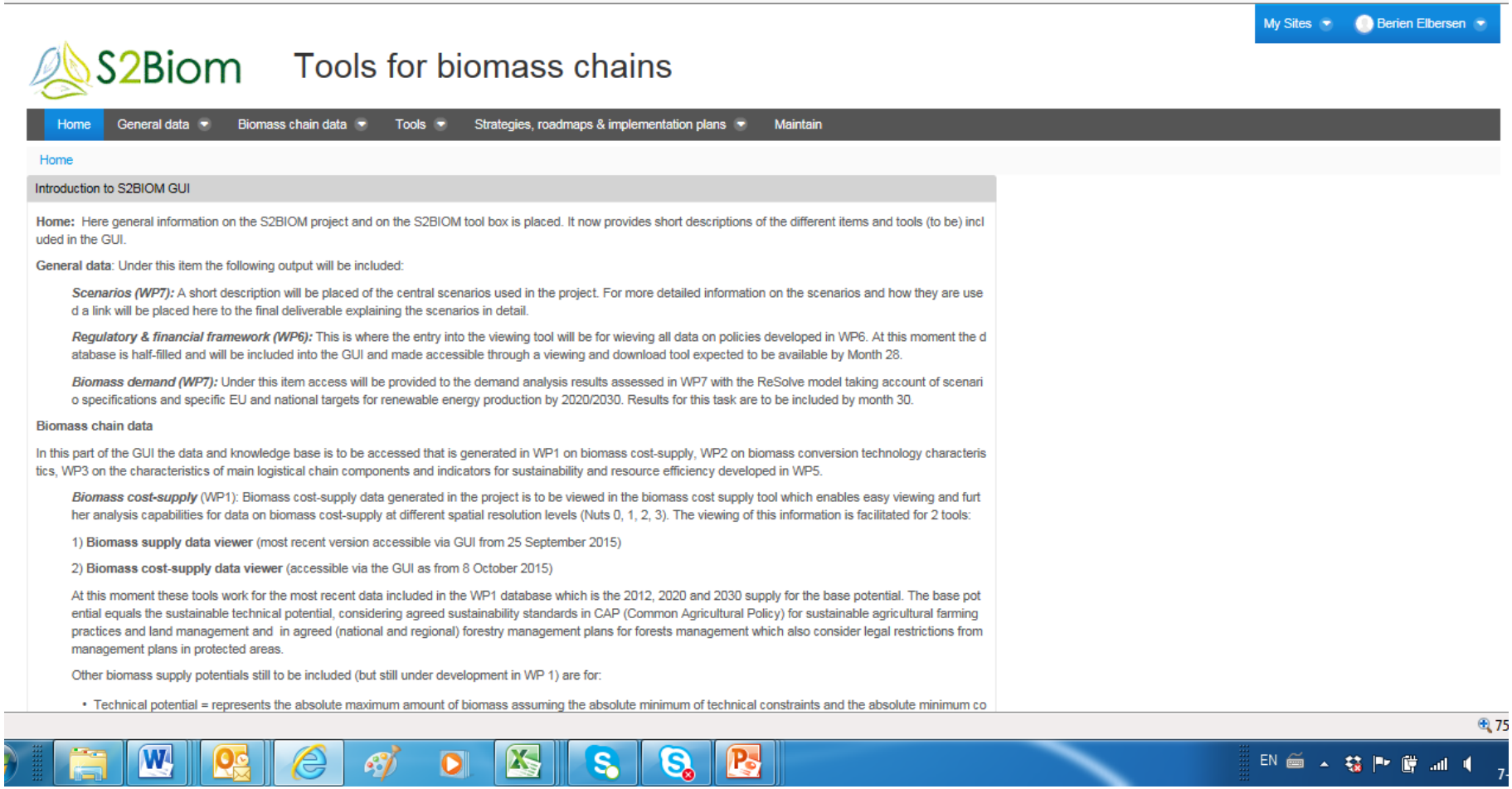
Tool for viewing main characteristics of technologies and matching biomass to pre-treatment and conversion technologies (4.2)

Market demand for bioenergy and biobased products (4.3)

Task 4.6: Central database

- Biomass supply (1.1, 1.3, 1.6) in type, quantity, and quality (2.2) parameters
- **Biomass cost data** (1.2,1.3)
- Technical , economic parameters of biomass conversion-end use combinations (2.1, 2.2)
- Technical and economic parameters of biomass pre-treatment (3.1)
- Environmental parameters of biomass types, conversion and pre-treatment technologies (1.3, 2.1, 3.1)
- Market demand (WP7.3)
- Biomass hubs and yards
- Scenario parameters
- Roadmaps

General User Interface



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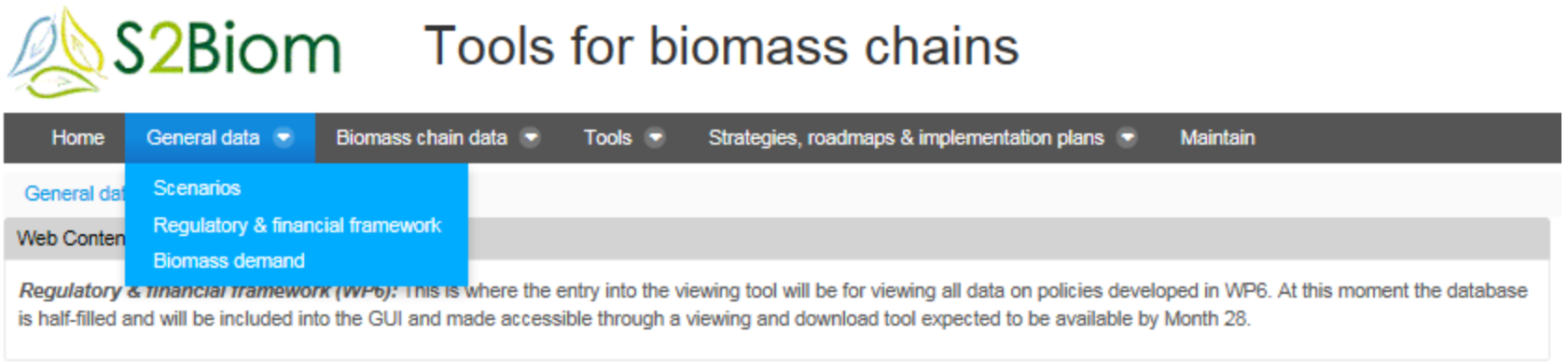

General data
- Scenarios (WP7)
- Regulatory & financial framework (WP6)
- Biomass demand (WP7)

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General user interface

Biomass chain data
- Biomass supply viewer
- Biomass cost-supply viewer
  - Domestic biomass
  - Imported biomass
- Conversion technologies (WP2.1 & WP4.2)
  - Thermal conversion processes
  - Chemical conversion processes
  - Bio-chemical conversion processes
  - (Biobased) products/building blocks
- Logistical components (WP3.1 & WP4.2)
- Value chain sustainability (WP5)

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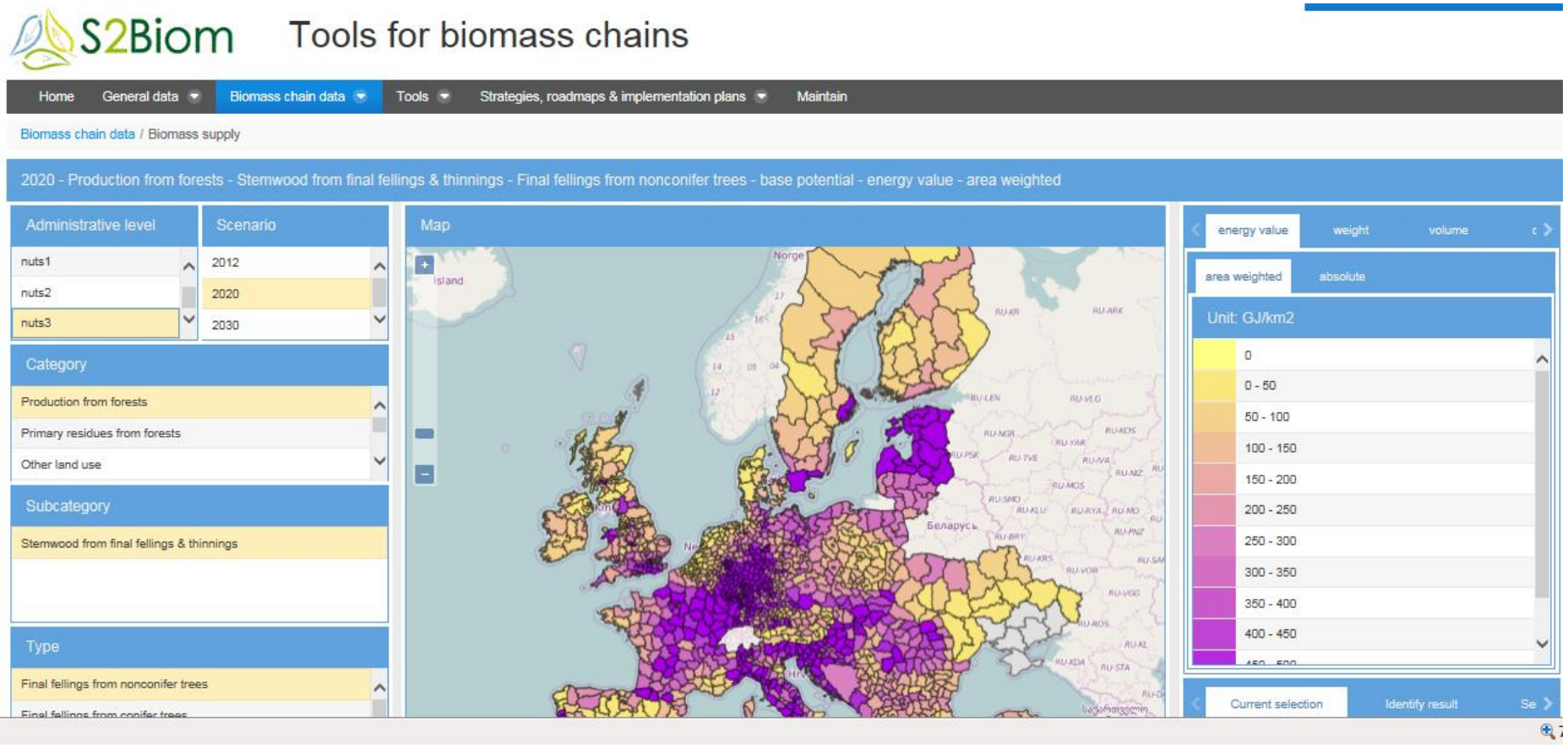
Cost-supply viewing tool



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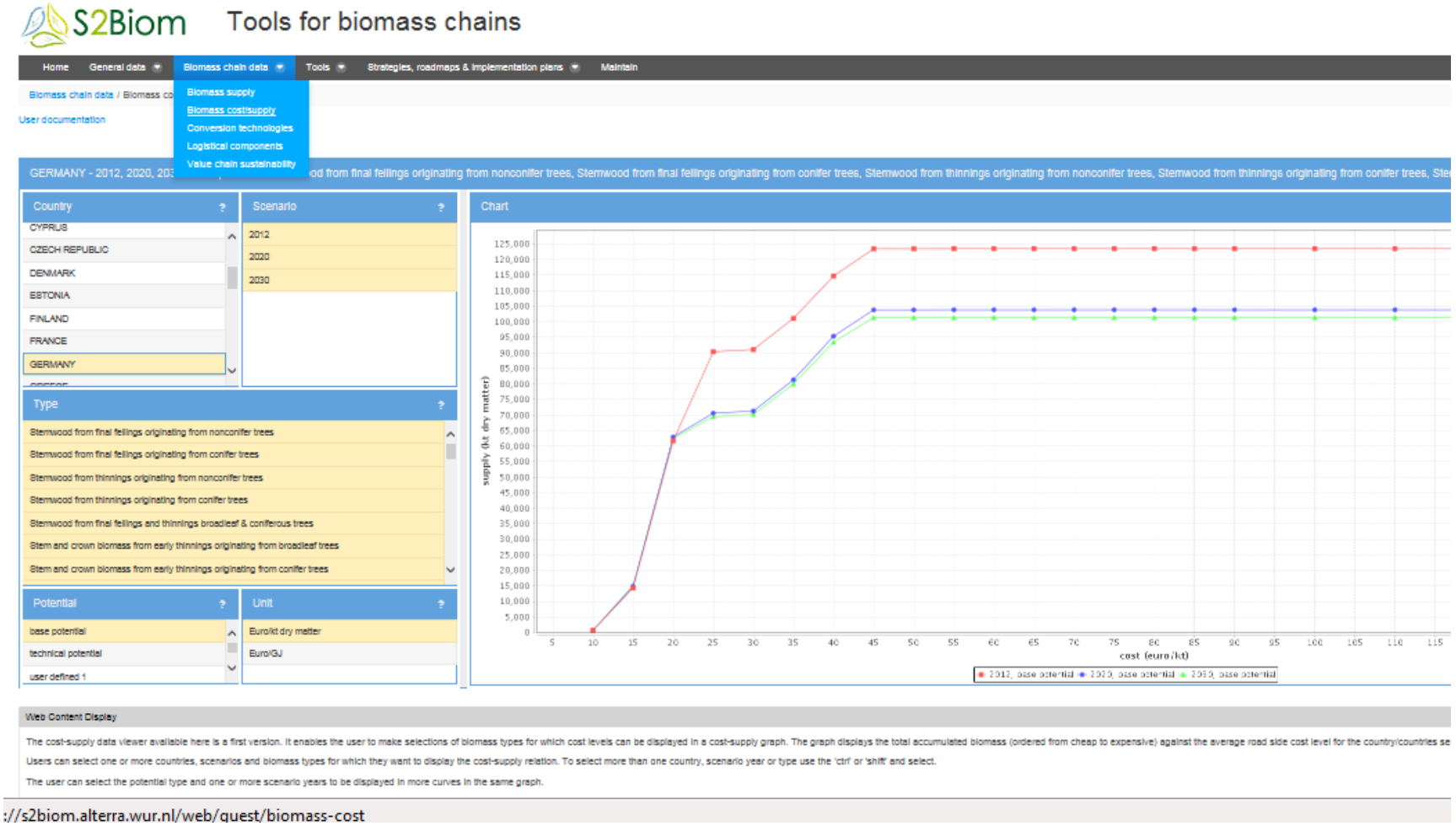
Cost-supply viewing tool



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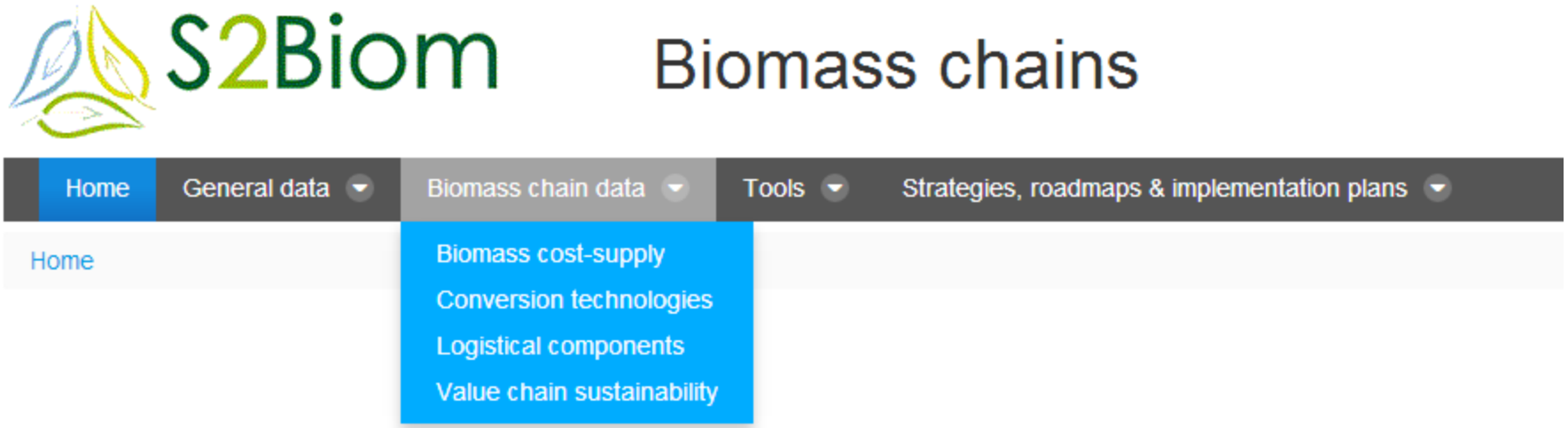

Biomass chain data
- Biomass cost-supply (WP1)
  - Domestic biomass
  - Imported biomass
- Conversion technologies (WP2.1 & WP4.2)
  - Thermal conversion processes
  - Chemical conversion processes
  - Bio-chemical conversion processes
  - (Biobased) products/building blocks
- Logistical components (WP3.1 & WP4.2)
- Value chain sustainability (WP5)

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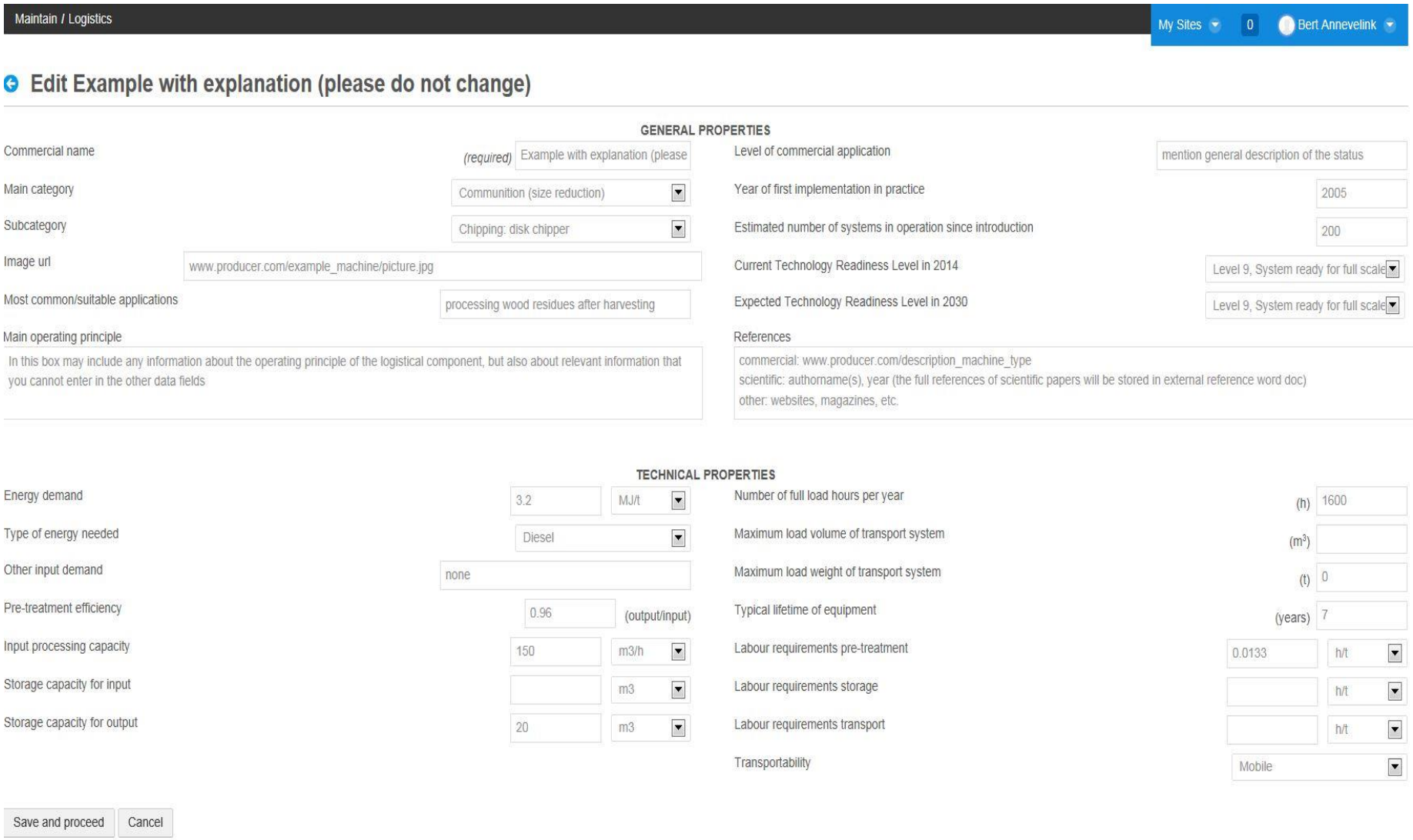
Database screen 1



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Database screen 2

BIOMASS INPUT SPECIFICATIONS

Acceptable biomass input groups: Wood | - | Crop: straw | - | -

Received (intermediate) biomass type: Branches

Minimum particle size input: length (mm) 1000 | width / diameter (mm) 50 | height (mm) 50

Maximum particle size input: length (mm) 5000 | width / diameter (mm) 300 | height (mm) 300

Moisture content input (%, wet base): Minimum 20 | Maximum 60

Bulk density input (kg/m^3, wet base): Minimum 100 | Maximum 300

Maximum input level of contamination with exogenous material (%, dry base):

Maximum ash content input (%, dry base): 1.5

BIOMASS OUTPUT SPECIFICATIONS

Indication of follow up process(es): Transport | - | - | - | -

Delivered (intermediate) biomass type: Wood chips

Dimensions: P16S: 3,15 mm < P < 16 mm | Fine fraction: F05: < 5 %

Moisture content output (%, wet base): Minimum 20 | Maximum 60

Bulk density output (kg/m^3, wet base): Minimum 200 | Maximum 400

Maximum output level of contamination with exogenous material (%, dry base):

Maximum ash content output (%, dry base): 1.5

FINANCIAL AND ECONOMIC PROPERTIES

Specific investment costs of equipment, included auxiliaries: (€) 60000

Operation and maintenance costs: 1.25 €/t

- Calculation method: Effective operation time

Storage costs: €/t

Loading costs: €/t

Unloading costs: €/t

Transport costs per kilometer: (€/km)

Transport costs per tonne: (€/t)

Transport costs per load: (€)

Transport costs fixed: (€)

Infrastructure needed: Connection to road network

Edited by: Hugo de Groot, Bert Annevelink

Save | Cancel

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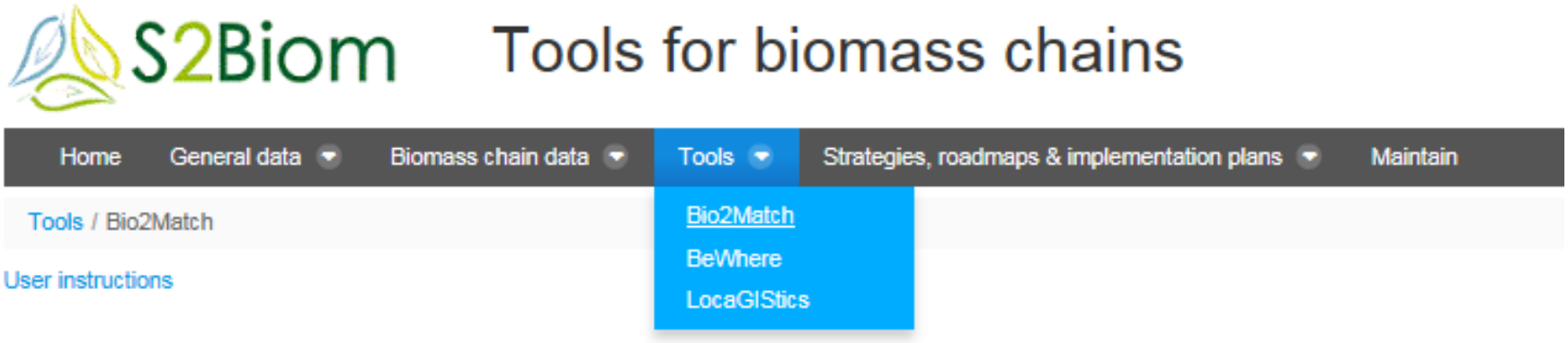
General user interface



Tools:

Bio2Match: Biomass & conversion pathways matching (WP2 &3)

Full chain assessments (WP4.3&4.4)

EU wide-national and regional assessment tool (**BeWhere**)

Local assessment tool (**LocaGIStics**)

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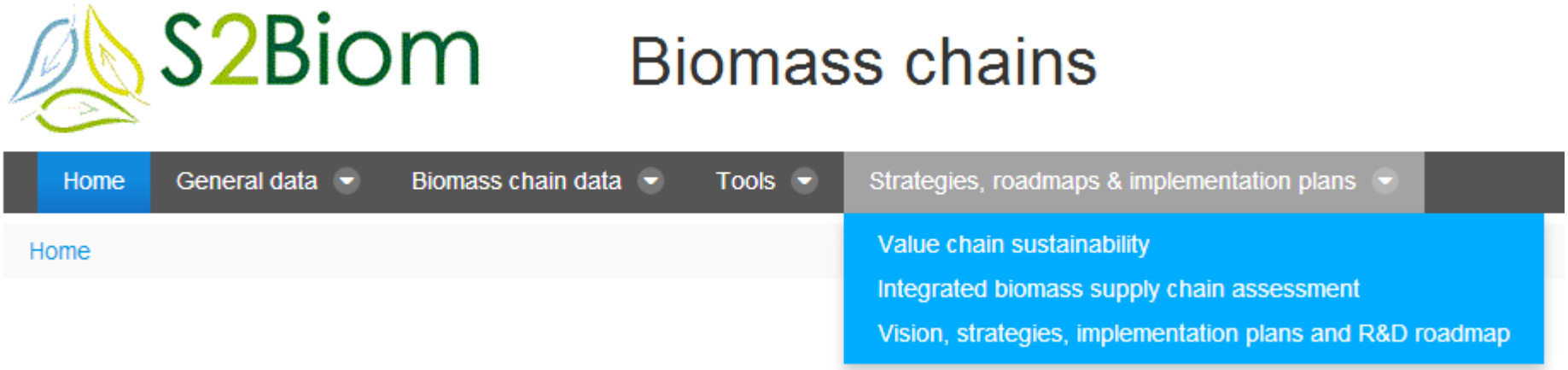

Strategies, roadmaps & implementation plans

Value chain sustainability (WP5)

Integrated biomass supply chain assessment (WP7)

Vision, strategies, implementation plans and R&D Roadmap (WP8)

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Testing the tool:

s2biom.alterra.wur.nl

Test login provided:

demo

helsinki

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THANKS FOR YOUR ATTENTION

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QUESTIONS?

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