Sustainable Product-Service System (S.PSS) applied to Distributed Renewable Energy (DRE) in low and middle-income (all) contexts: a Scenario tool for designers.

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Politecnico di Milano

Sustainable Energy for All By Design conference
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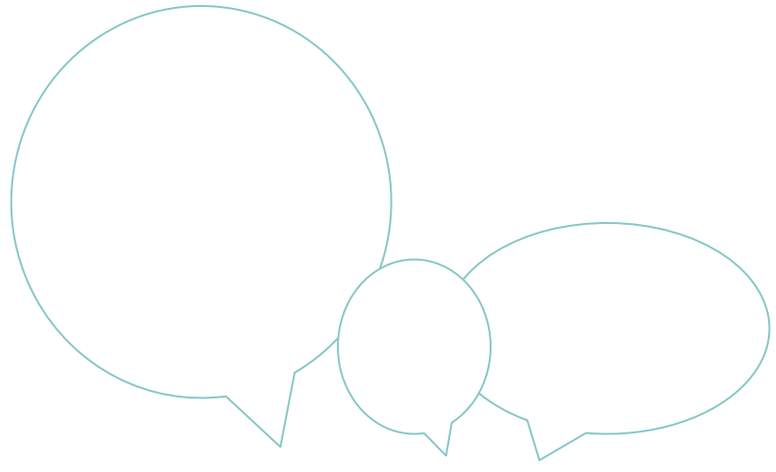
What a Scenario is?

*A way to **design and narrate possible** (sustainable) **futures**,*
giving inspirations to open new visions and generate ideas, while facilitating strategic conversations among stakeholders.

. Applied to different fields;
. Narrated from the user point of view;
. (Usually) With a pop style.



How the world will be if… *Sustainable Product-Service Systems (S.PSS) will be applied to Distributed Renewable Energies (DRE) in low and middle-income contexts?*

How the world will be if…
Energy *will be for* ***All*** *and* ***Sustainable****?*

Scenario

Aimed to

***Inspire** designers and stakeholders to design towards radically new social, economic and technical visions towards Sustainable Energy for All solutions!*

***Facilitate** creative processes and strategic conversations among different actors!*

Customer type

Horizontal axis *explains the stakeholders relations within the system: Business to Customer (left) or Business to Business (right)*

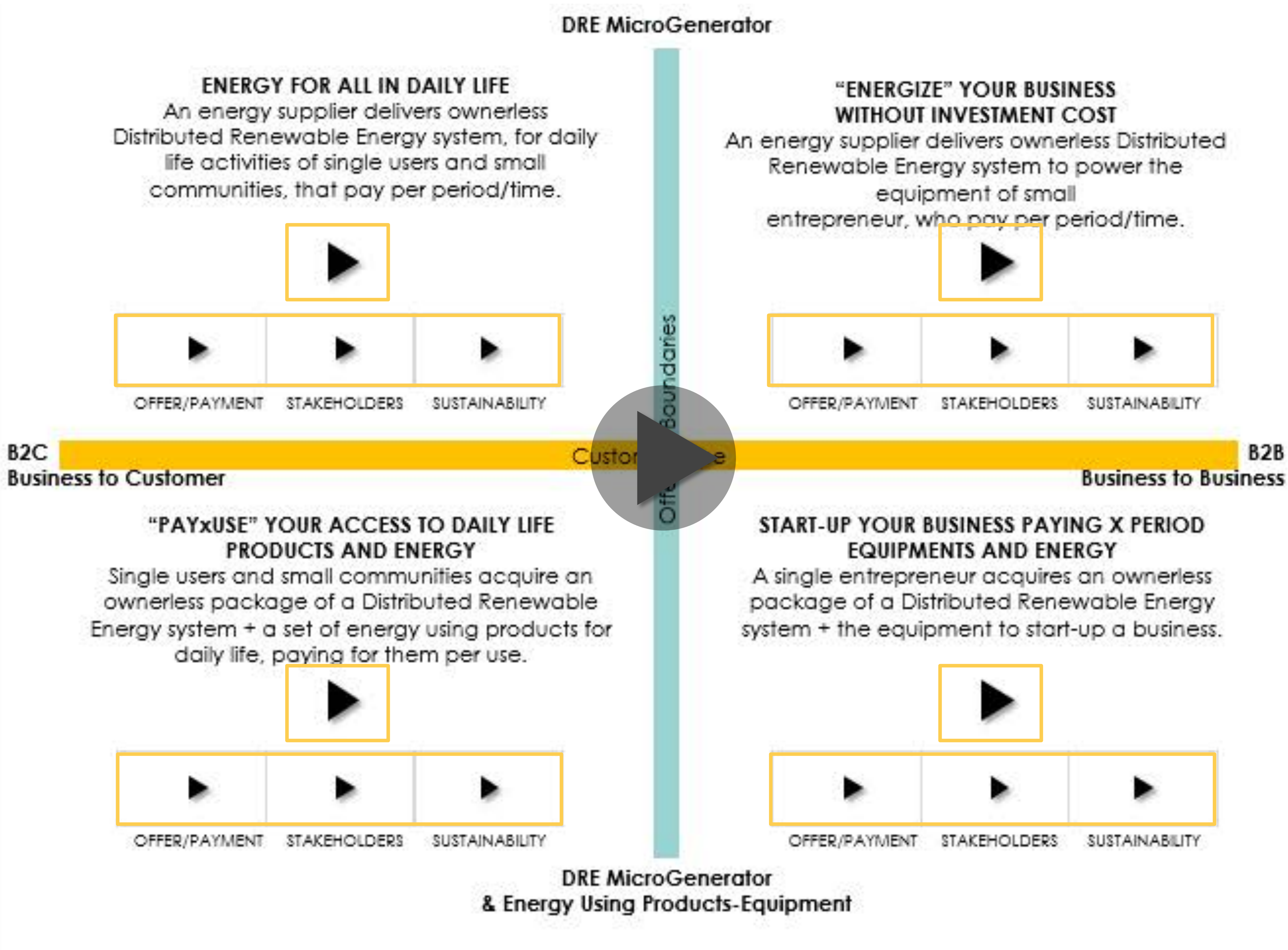
Boundaries

Customer type

Horizontal axis *explains the stakeholders relations within the system: Business to Customer (left) or Business to Business (right)*

Vertical axis *explains the products included in the offered system, on top is only offered the micro generator for the distributed production of energy, on bottom is offered the micro generator plus the energy using products or equipment.*

Offer


DRE MicroGenerator
ENERGY FOR ALL IN DAILY LIFE
An energy supplier delivers ownerless Distributed Renewable Energy system, for daily life activities of single users and small communities, that pay per period/time.
OFFER/PAYMENT
STAKEHOLDERS
SUSTAINABILITY
"ENERGIZE" YOUR BUSINESS WITHOUT INVESTMENT COST
An energy supplier delivers ownerless Distributed Renewable Energy system to power the equipment of small entrepreneur, who pay per period/time.
OFFER/PAYMENT
STAKEHOLDERS
SUSTAINABILITY
Boundaries
B2C
Business to Customer
B2B
Business to Business
"PAYxUSE" YOUR ACCESS TO DAILY LIFE PRODUCTS AND ENERGY
Single users and small communities acquire an ownerless package of a Distributed Renewable Energy system + a set of energy using products for daily life, paying for them per use.
OFFER/PAYMENT
STAKEHOLDERS
SUSTAINABILITY
START-UP YOUR BUSINESS PAYING X PERIOD EQUIPMENTS AND ENERGY
A single entrepreneur acquires an ownerless package of a Distributed Renewable Energy system + the equipment to start-up a business.
OFFER/PAYMENT
STAKEHOLDERS
SUSTAINABILITY
DRE MicroGenerator
& Energy Using Products-Equipment

Scenario design process

The Scenario has been developed during a MSc thesis.

Best practices *Idea generation* *Clusters of ideas* *Polarity Diagram* *Scenario (4 visions)*

WORKSHOP 2 JULY 2014, MILAN

WORKSHOP 21 JULY 2014, MILAN

Scenario on field experiences

LeNSes Pilot course, ***South Africa***

Curricular course, ***Italy***

LeNSes Pilot course, ***Kenya***

Curricular course, ***Italy***

LeNSes lifelong learning course, ***Botswana***

LeNSes lifelong learning course, ***Uganda***

2014

2015

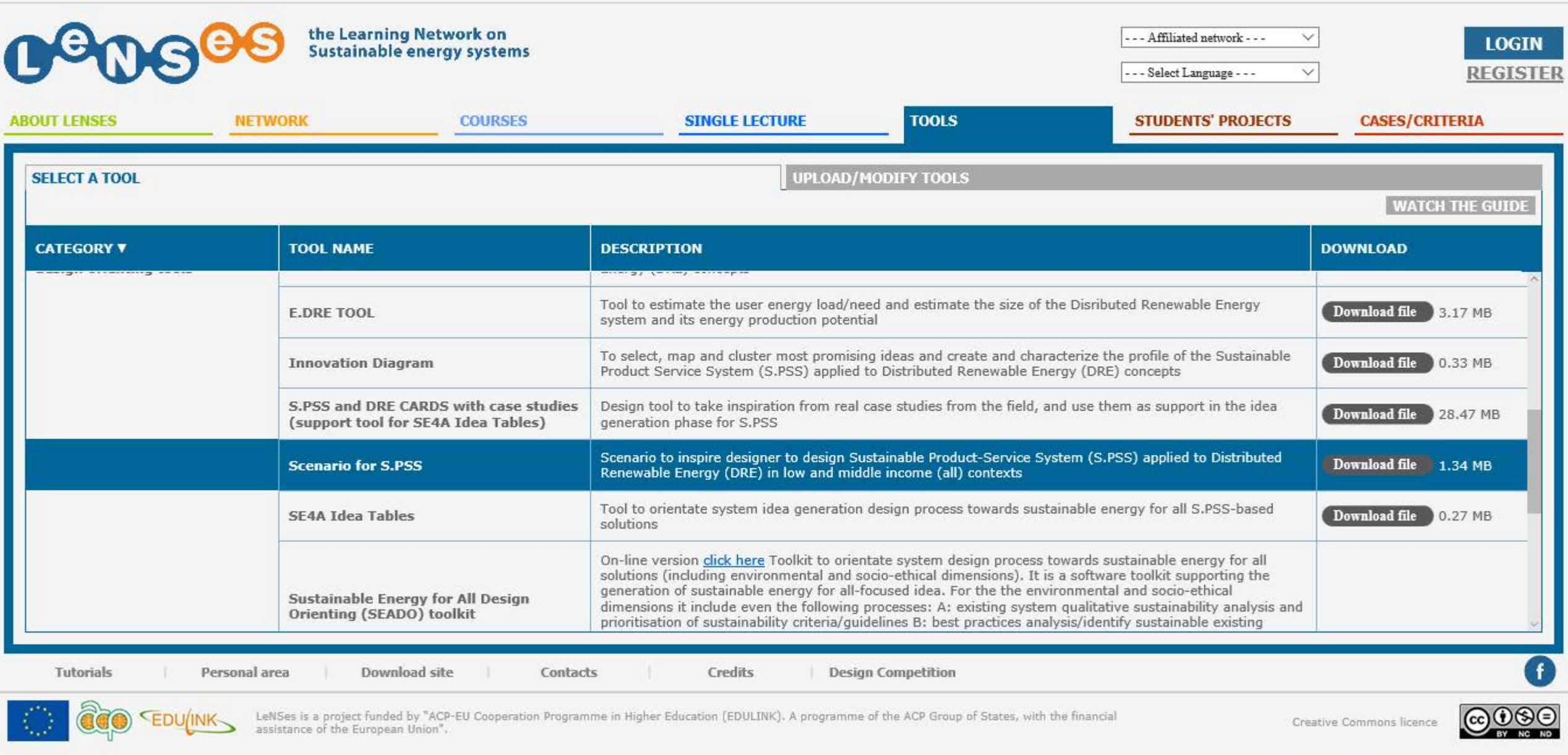
Now!

Integration in the process

Output: a series of ***new visions and ideas*** *favoring creative processes and co-design activities towards Sustainable Energy for All solutions.*

Scenario a free tool

*Scenario is available online in **open source** and **copy-left** to be used for further researches and processes at **www.lenses.polimi.it**.*



Thanks!

To know more on the Scenario and other tools
*come at the **INFO POINT**!*

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