European Commission

SUSTAINABLE ENERGY WEEK 24-28 JUNE 2013

EU SUSTAINABLE ENERGY WEEK
24-28 JUNE 2013

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27 June 2013

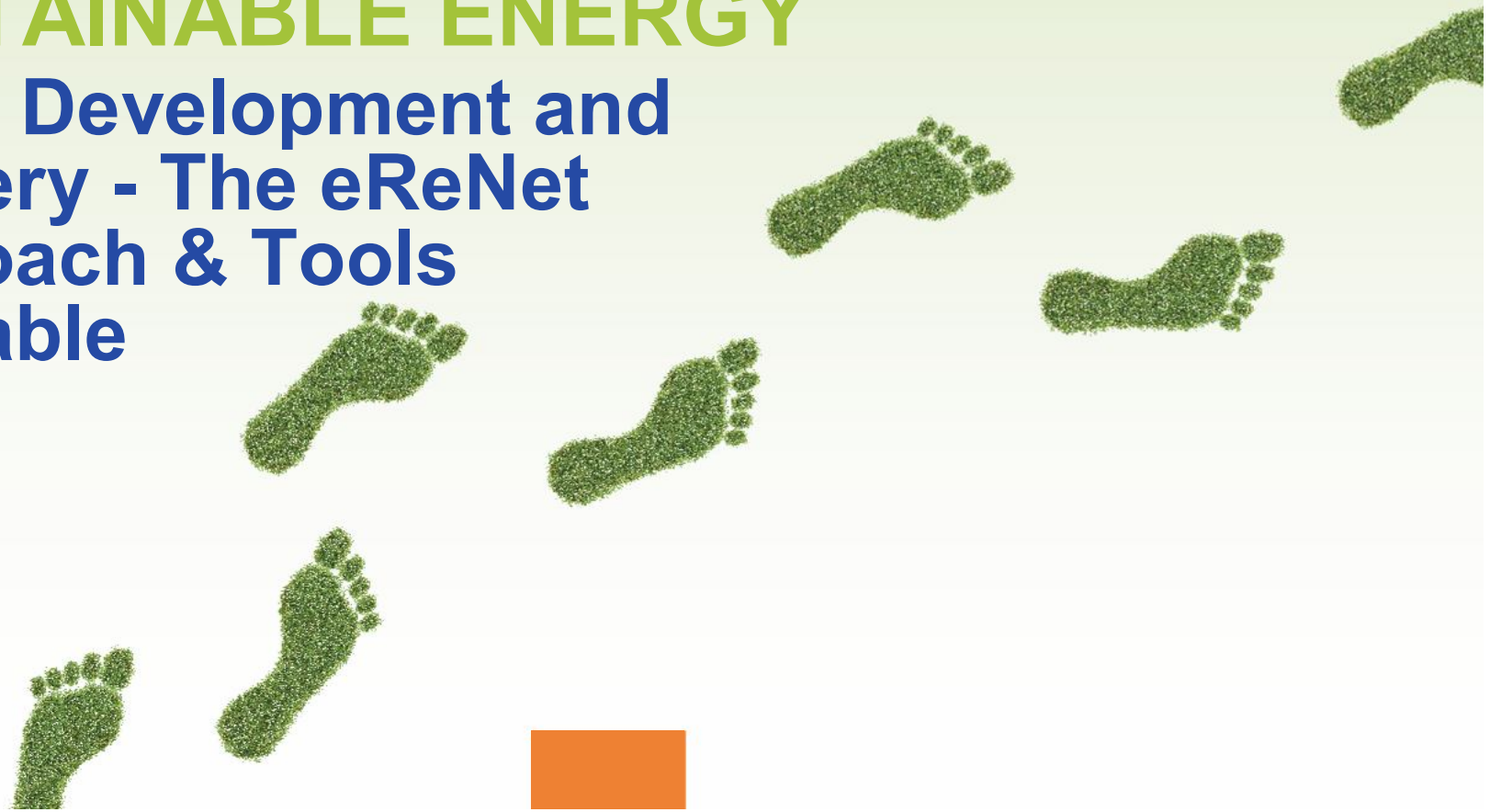
Energy

European Commission

SUSTAINABLE ENERGY WEEK 24-28 JUNE 2013

LOCAL LEADERSHIP IN SUSTAINABLE ENERGY

SEAP Development and Delivery - The eReNet Approach & Tools Available



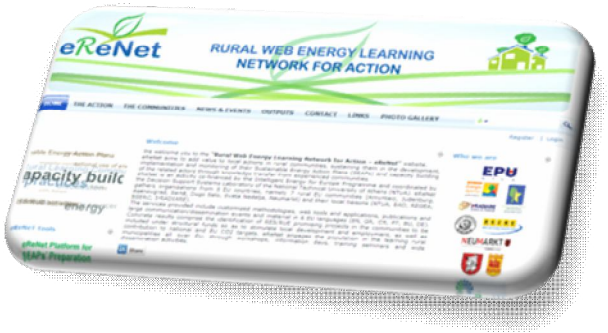
Outline

- Overview;
- eReNet Vision;
- Adopted Approach;
- Engagement & Training of Local Actors;
- eReNet Tool for SEAPs' Development;
- Web Application;
- Expected Results;
- Conclusions.

Overview (1/2)

- Rural Web Energy Learning Network for Action (eReNet);
- Under the Intelligent Energy for Europe Programme, managed by the Executive Agency for Competitiveness and Innovation;
- **Duration of Action:** 21/06/2011 – 20/12/2013;
- **Coordinator:** National Technical University of Athens (NTUA);

eReNet awarded with the Energy Globe Award Greece



Website:
http://erenet.epu.ntua.gr

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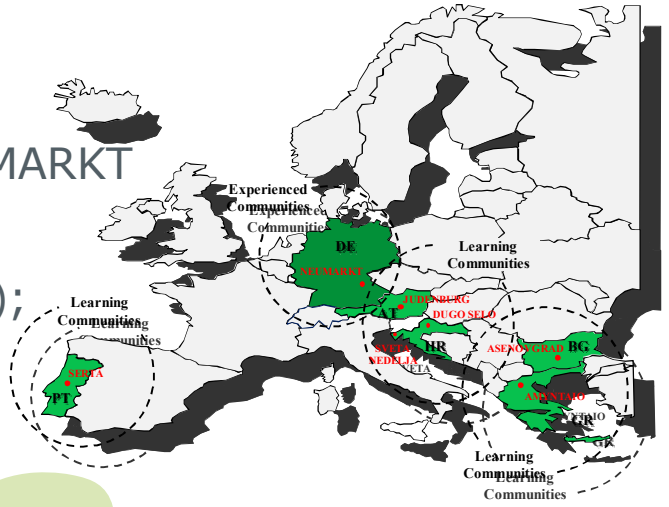
Overview (2/2)

- National Technical University of Athens – NTUA (Greece);
- Energy Agency Upper Styria – EAO (Austria);
- North-West Croatia Regional Energy Agency – REGEA (Croatia);
- Black Sea Energy Research Center – BSERC (Bulgaria);
- IrRADIARE, Ltd – IrRADIARE (Portugal);
- Municipality of Amyntaio – AMYNTAIO (Greece);
- Town of Neumarkt (in the upper Palatinate) – NEUMARKT (Germany);
- Asenovgrad Municipality – ASENOVGRAD (Bulgaria);
- Municipality of Judenburg – JUDENBURG (Austria);
- Sertã City Council – CM SERTÃ (Portugal).



eReNet Vision (1/2)

Rural Communities

Energy Sustainable Rural Communities

- Inhabited by a large amount of Europe's population, while covering 90% of Europe's land surface;
- Generate 45% of gross added value in EU-27 and 53% of the employment;
- Possess a vast potential for the realization of Renewable Energy & Rational Use of Energy (RES/RUE) activities;
- Fewer rural regions' adhesion to the Covenant of Mayors (CoM) initiative;
- Face particular challenges as regards growth, jobs and sustainability, situation that is being aggravated by the financial and economic crisis.

eReNet Vision (2/2)

- Support CoM and rural communities' Sustainable Energy Action Plans (SEAPs) through knowledge transfer and capacity building;
- Socialize the existing tools and methodologies for SEAPs' development and monitoring;
- Promotion of RES/RUE activities in rural areas by supporting promising initiatives to be included under structural funds;
- Linking energy actors at local and EU level;
- Creation of rural learning municipalities on sustainable energy.

Adopted Approach

Levels of Tutoring & Networking Local Authorities

Engagement & Training of Local Actors (1/3)

Training Workshops

- Capacity building of the related actors via interaction and participatory processes.
- Knowledge transfer from other rural communities in the country (e.g. panel discussion, field visits) is essential ⇒ Added value to local actions and the importance of local problems in the rural communities.

Engagement & Training of Local Actors (2/3)

Public Consultation Meetings

- The local authorities and stakeholders can co-create the energy vision for the territory and the ways for its implementation, and invest financial and human resources towards this direction;
- The stakeholders' lack of contribution is an important barrier. New approaches on triggering their interest should be adopted;
- Emphasis on the need for targeted interventions in the agricultural sector.

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Engagement & Training of Local Actors (3/3)

Training Seminars & Material

Diffuse the idea and modus operandi of the SEAPs in other communities with similar characteristics, assuring thus the wider impact of the results;

Information Days

Advice on planning and funding, as well as local and regional energy companies and local investors in order to attract investors and obtain finance for RES/RUE projects.

eReNet Tool for SEAPs' Development (1/5)

Key Parameters for Rural Communities

- Increased energy consumption in the Agricultural/Fishery/Forestry sector;
- Less significant role of industry and the usually small contribution of public transport;
- Heavier reliance on private transportation;
- Smaller number of engaged stakeholders, which allows for a different decision making process;
- Different options available for RES/RUE technologies;
- The rural communities are not served by good infrastructure, such as lack of grids (e.g. natural gas), older and less efficient buildings.

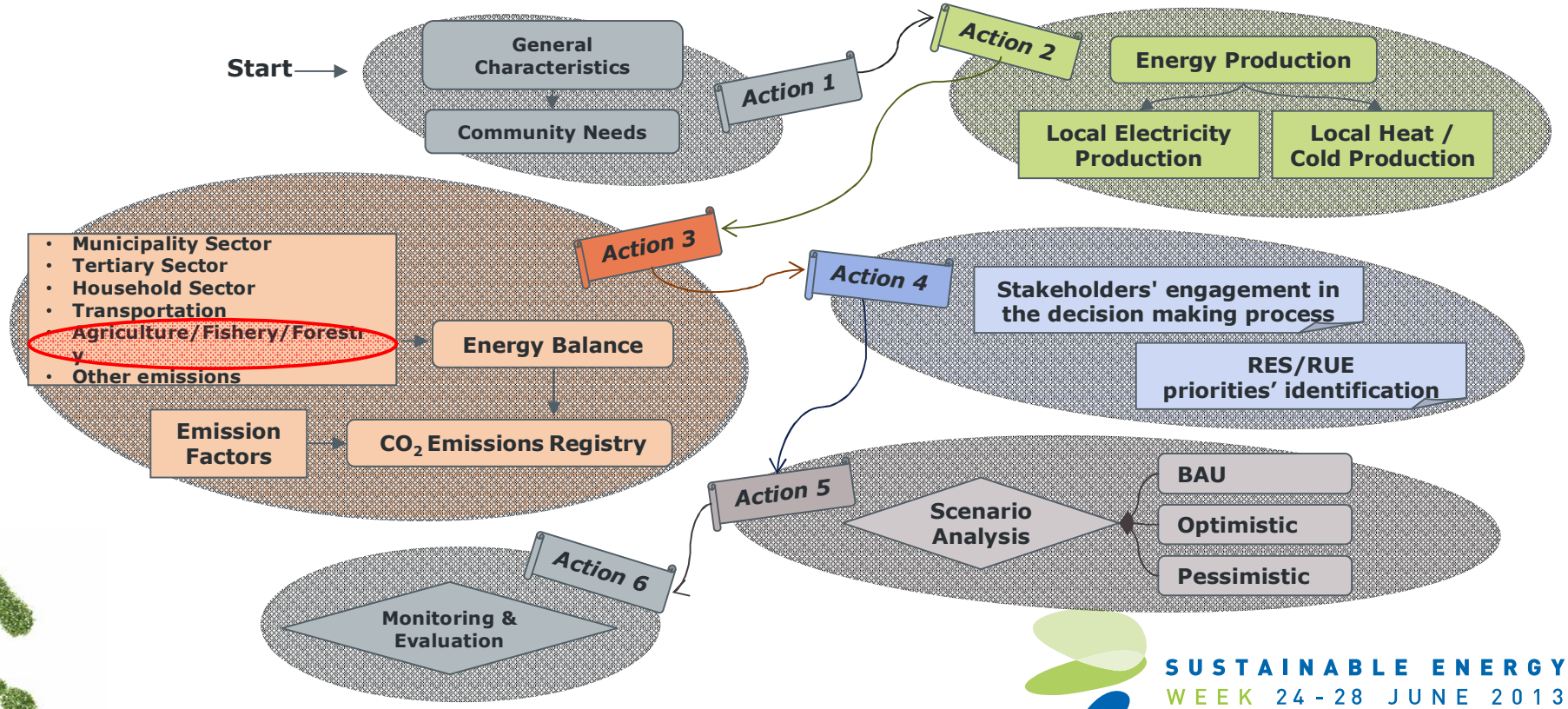
eReNet Tool for SEAPs' Development (2/5)

Customized Methodology

- Based on the Covenant of Mayors (CoM) guidelines and the available SEAP methodologies and tools developed in the past, customized to the rural communities' characteristics;
- Separate study of the energy consumption and the proposition of targeted actions/ measures within the framework of the SEAP;
- The relevant consumptions are included in the related sectors (Tertiary, Transport) of the submitted Baseline Emissions Inventory Table, according to the CoM guidelines.

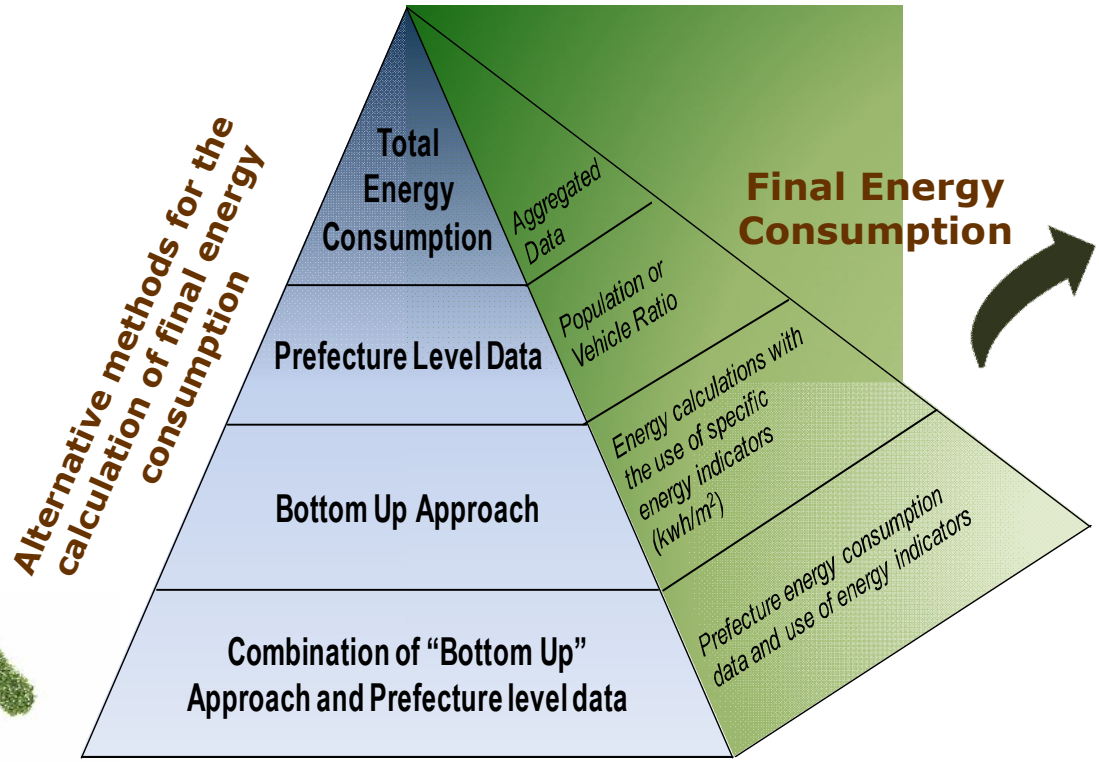
eReNet Tool for SEAPs' Development (3/5)

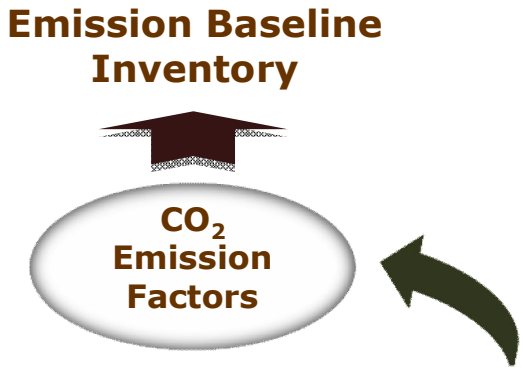
General Philosophy



eReNet Tool for SEAPs' Development (4/5)

Baseline Emission Inventory





- Main approaches for data entry in Greece, Austria, Croatia, Bulgaria, Portugal and Germany;
- Consortium experience.

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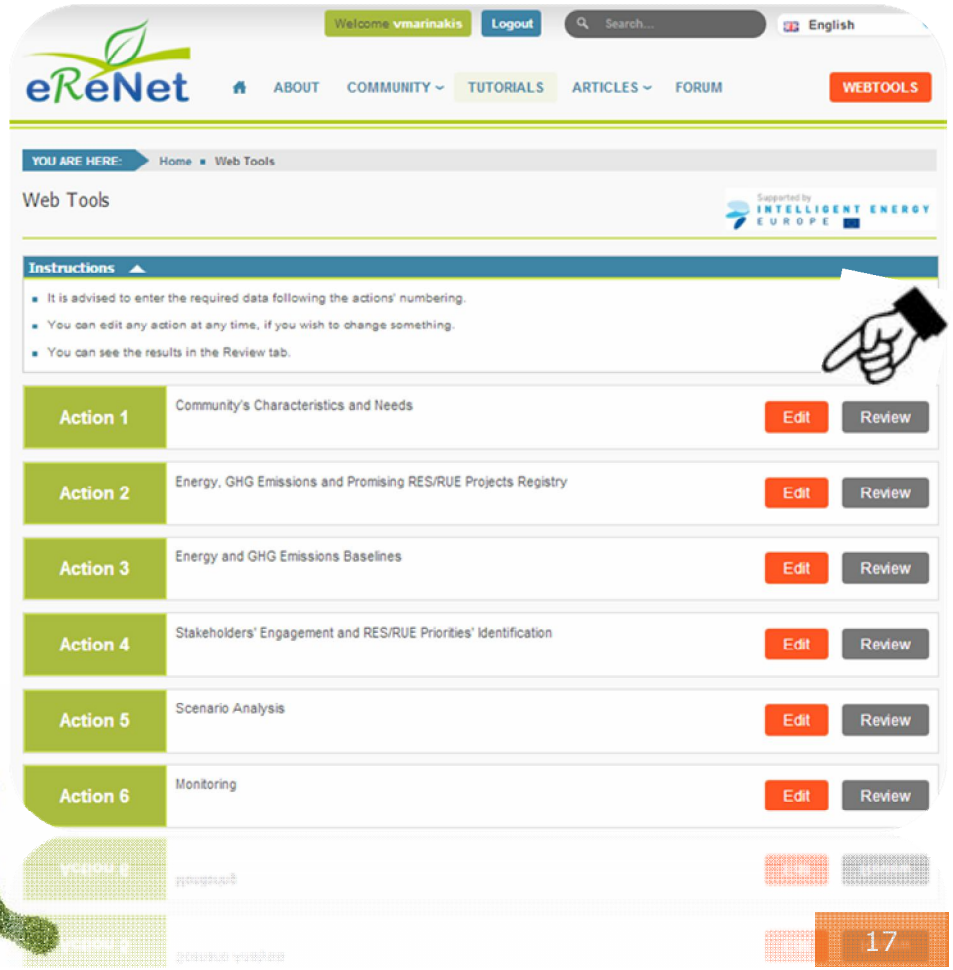
eReNet Tool for SEAPs' Development (5/5)

Offering

- Free for use for all registered users;
- Facilitation of the required procedures for the development and monitoring of a SEAP;
- Available in 6 languages (En, Gr, Hr, De, Pt, Bg);
- Guides the user through all SEAP development steps, one by one.

Web Application (1/3)



Available at:

http://erenet-tools.epu.ntua.gr

Editing the necessary community data

Reviewing the results obtained from the inserted data

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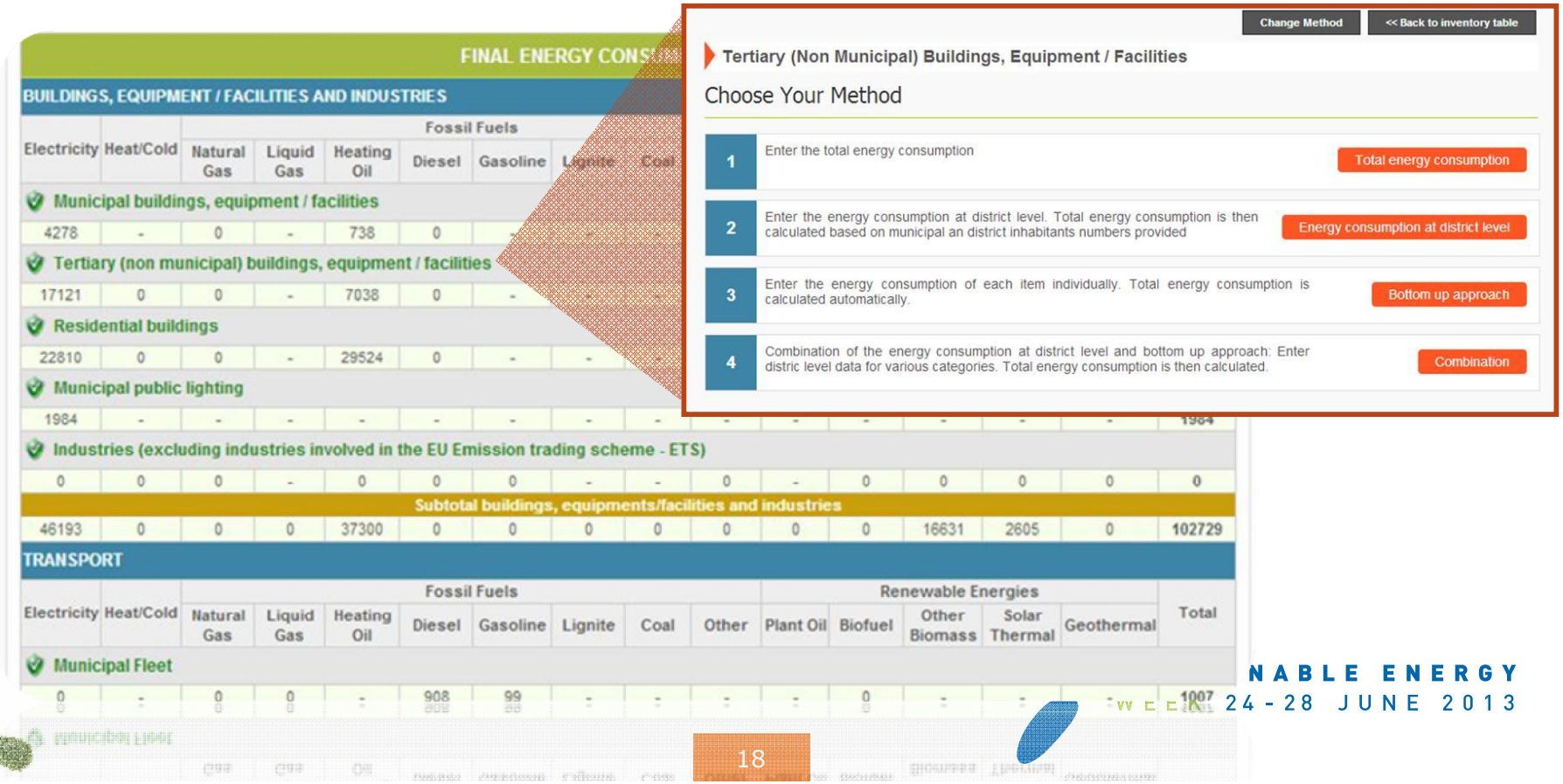
Web Application (2/3)

Final Energy Consumption

Alternatives Methods



FINAL ENERGY CONS

BUILDINGS, EQUIPMENT / FACILITIES AND INDUSTRIES

Electricity	Heat/Cold	Fossil Fuels: Natural Gas	Liquid Gas	Heating Oil	Diesel	Gasoline	Lignite	Coal							
Municipal buildings, equipment / facilities															
4278	-	0	-	738	0	-									
Tertiary (non municipal) buildings, equipment / facilities															
17121	0	0	-	7038	0	-									
Residential buildings															
22810	0	0	-	29524	0	-	-								
Municipal public lighting															
1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1984
Industries (excluding industries involved in the EU Emission trading scheme - ETS)															
0	0	0	-	0	0	0	-	-	0	-	0	0	0	0	0
Subtotal buildings, equipments/facilities and industries															
46193	0	0	0	37300	0	0	0	0	0	0	0	16631	2605	0	102729

TRANSPORT

Electricity	Heat/Cold	Fossil Fuels: Natural Gas	Liquid Gas	Heating Oil	Diesel	Gasoline	Lignite	Coal	Other	Renewable Energies: Plant Oil	Biofuel	Other Biomass	Solar Thermal	Geothermal	Total
Municipal Fleet															
0	-	0	0	-	908	99	-	-	-	-	0	-	-	-	1007

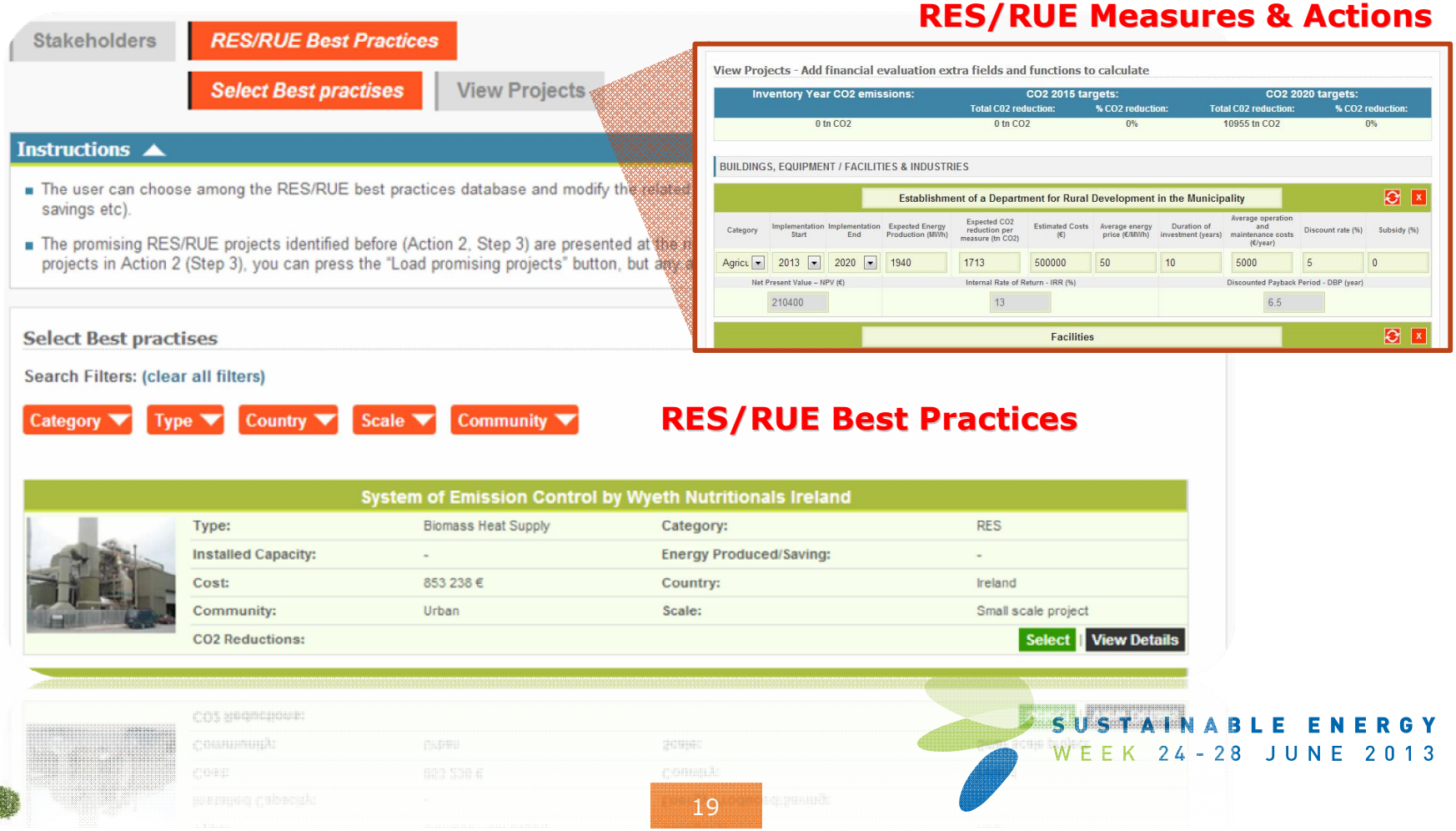
Change Method | << Back to inventory table

Tertiary (Non Municipal) Buildings, Equipment / Facilities

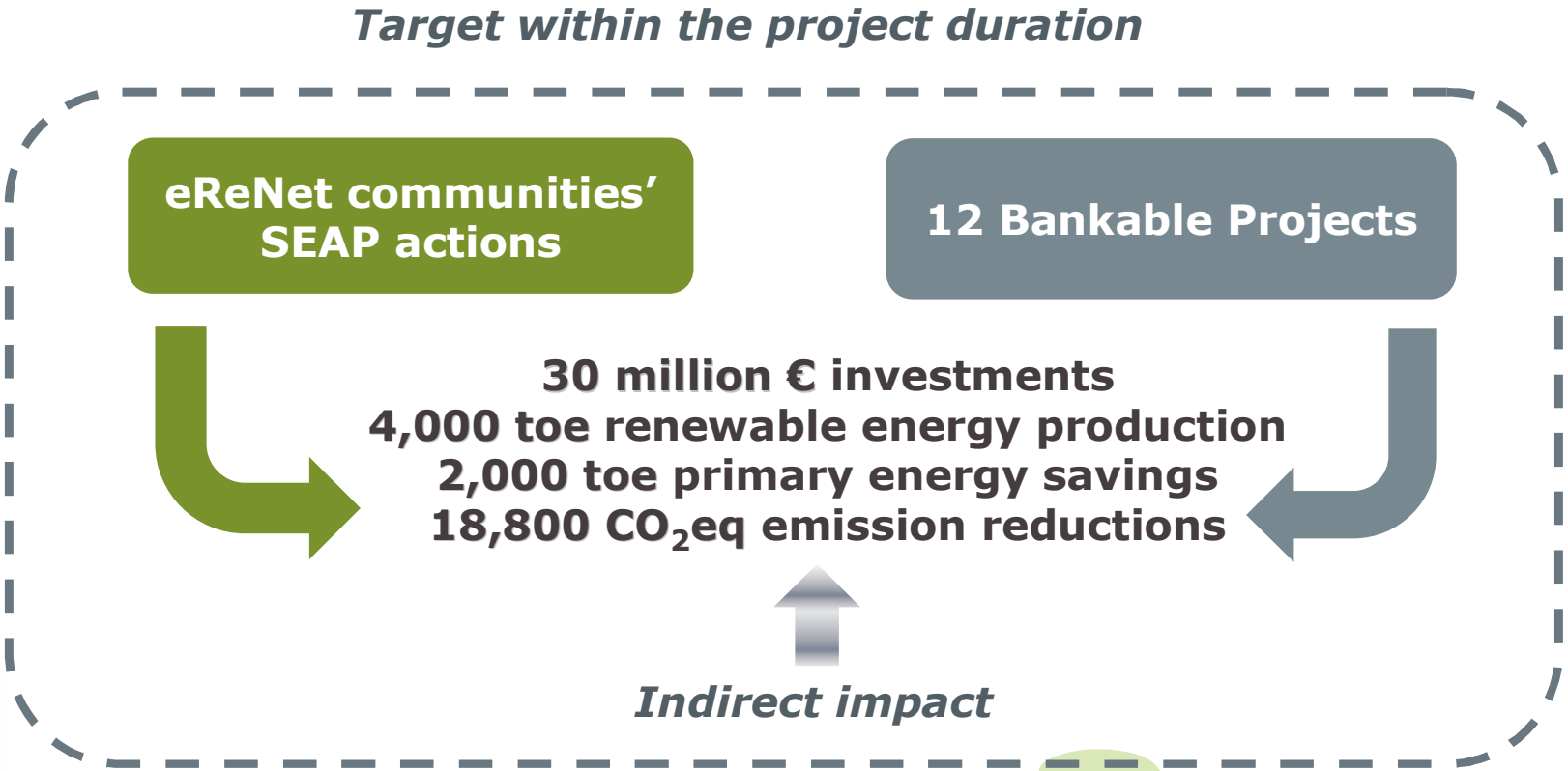
Choose Your Method

1	Enter the total energy consumption	Total energy consumption
2	Enter the energy consumption at district level. Total energy consumption is then calculated based on municipal an district inhabitants numbers provided	Energy consumption at district level
3	Enter the energy consumption of each item individually. Total energy consumption is calculated automatically.	Bottom up approach
4	Combination of the energy consumption at district level and bottom up approach: Enter distric level data for various categories. Total energy consumption is then calculated.	Combination

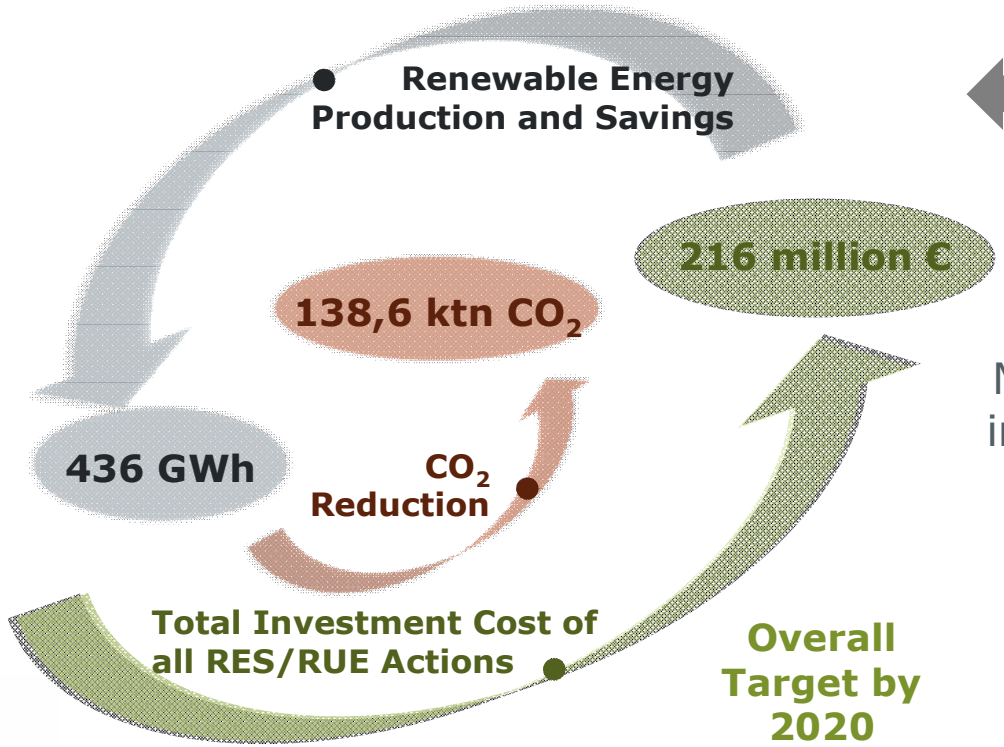
Web Application (3/3)



Expected Results (1/2)



Expected Results (2/2)



Overall Target by 2020

Submission of 6 eReNet communities SEAPs

Maximizing the impact by 2020

50 communities supported for their SEAPs

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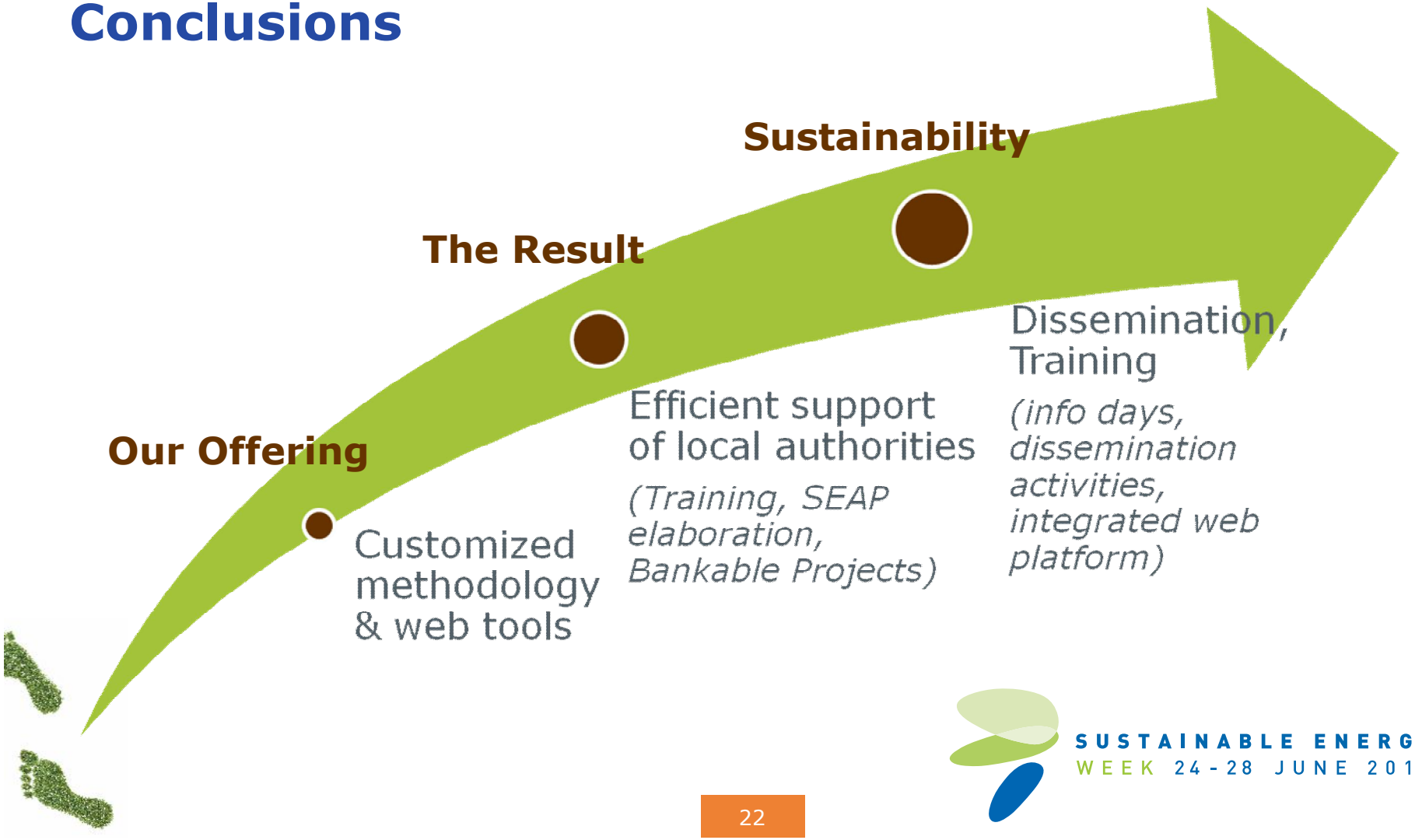
Conclusions



Thank you for your attention!

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Visit us at: http://erenet.epu.ntua.gr

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