uP_running

Take-off for sustainable supply of woody biomass from agrarian pruning and plantation removal

Building up local bioenergy value chains based on fruit tree residues from pruning and uprooting operations: the boosting role of regional stakeholder networks

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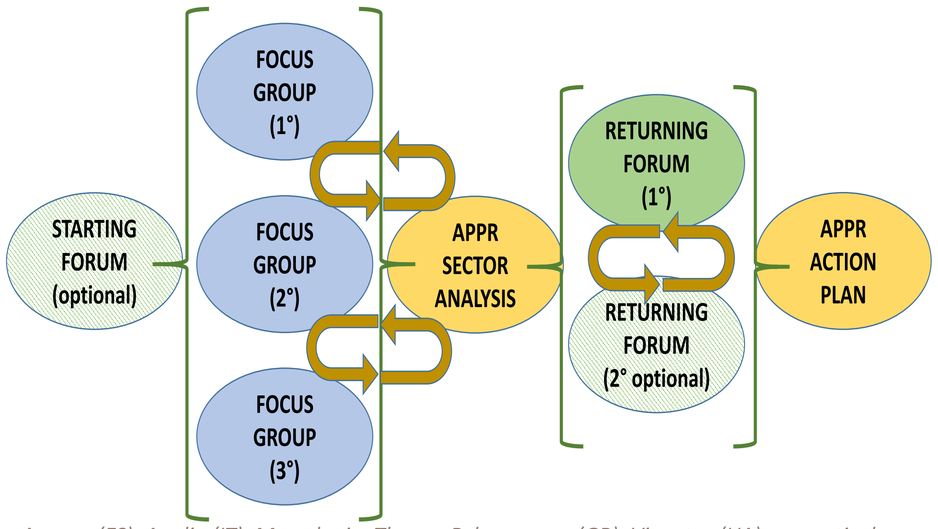
INTRODUCTION

*"**uP_running**" is an EU H2020 project currently in progress (2016-2019) . The project goal is to set out the path in developing bioenergy value chains based on fruit tree residues from pruning and uprooting operations. Considering that most Mediterranean countries are participating in the project (Spain, Greece, Italy, France, Portugal and Croatia, together with Ukraine), olive groves and vineyard are specifically considered, although not exclusively.*

Despite significant technological progresses greatly improved the feasibility of this kind of business, still a discouraging immobility is observed and, apart few virtuous exceptions, a "wait-and-see" behavior is generally detected.

*A "**stakeholders' network**" (created in each project "**Demo Region**") is the participating approach considered the most fruitful to overcome barriers, seize the opportunities, and promote the building up of a productive sector able to valorize residual feedstock such as pruning/uprooting.*

*Results about the first year of project on this issue are reported, focusing on activities supporting the local bioenergy value chains through a "**Sector Analysis**" and a consequent "**Action Plan**" at regional scale.*



LEGENDA:
***Demo Region** : value chains are tested and demonstrated in several EU regions, i.e. Aragon (ES), Apulia (IT), Macedonia, Thrace, Peloponnese (GR), Vinnytsa (UA), respectively.*
***APPR**: woody biomass obtained from agricultural pruning and plantation removal.*

METHODOLOGY APPLIED

*The general status of the sector, its composition and key actors, the structure of possible value chains and the different kind of business models potentially observed were detected through the "**Sector analysis**". Identifying the main sector **constraints and barriers** (negative factors) as well as the sector **driving forces (**positive factors) was the starting phase of the process. Further discriminating between "internal" and "external" factors smoothed the way to an easy application al the **SWOT analysis** (Strengths - Weaknesses – Options – Threats). Internal factors are under control of the sector participants, while external factors should be assigned to general socio-economic conditions.*

*The "**Action plan**" was prepared by applying a paired combination of an "internal" together with an "external" SWOT factor. In this way, **strategies** of sector development were defined and a peculiar set of **targets**, specifically tailored with respect to the sector's main characteristics in each region, was also identified.*

PARTICIPATORY APPROACH

*After a preparatory phase, workshops (**forums** or alternatively **focus groups**) were organized in each **Demo Region** during the first project year to promote stakeholders' commitment, perform the **Sector Analysis**, and consolidate a common vision about the **APPR** sector and its strategic development.*

*Three consecutive workshops ("focus group") took place in different regional areas. Optionally, a "forum" was organized before, to launch the 'uP_running' project and activate a communication campaign. One returning "forum" was held in each **Demo Region**, this time specifically with the aim of discussing the outcomes of the "**Sector Analysis**" and exchange opinions about the "**Action Plan**", trying to find the larger agreement and stakeholders' commitment on the identified strategies.*

APPR VALUE CHAIN COMPOSITION

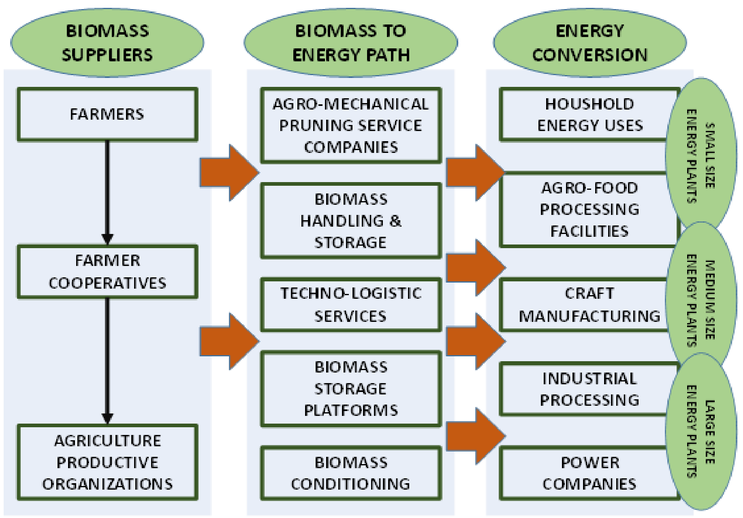
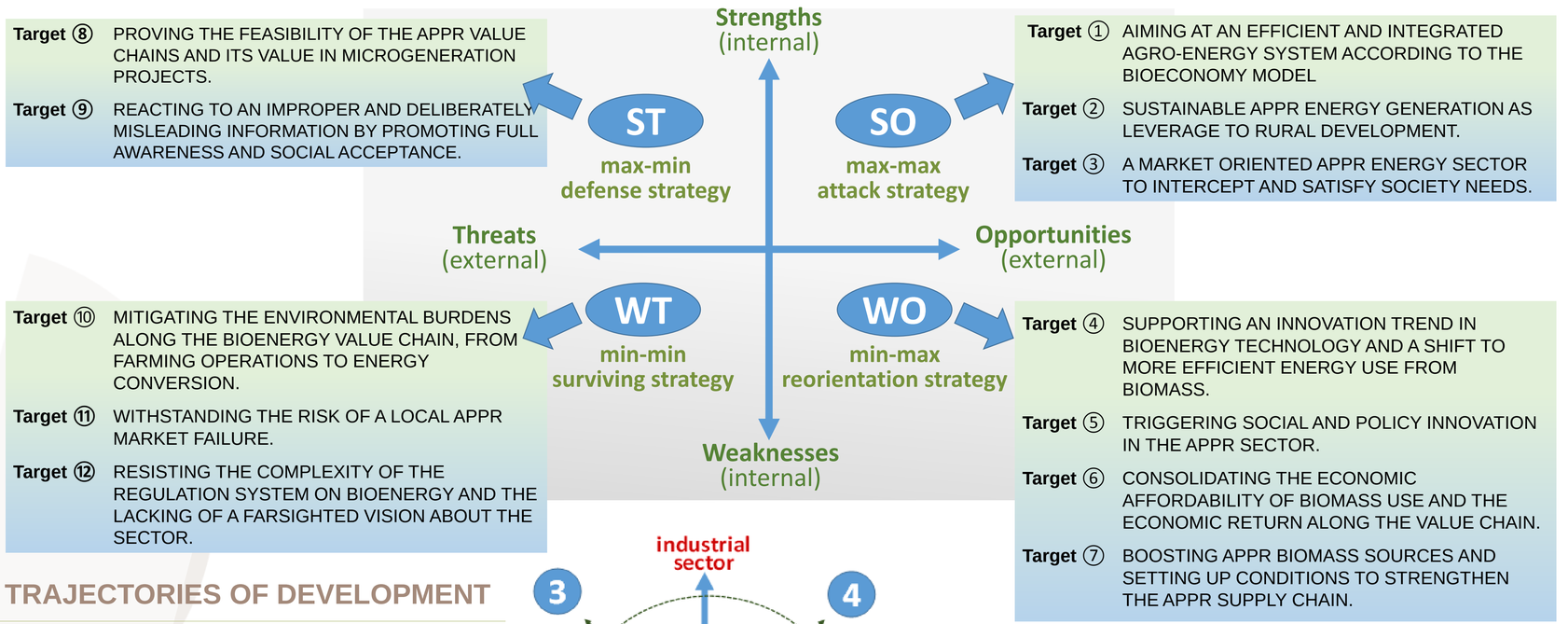
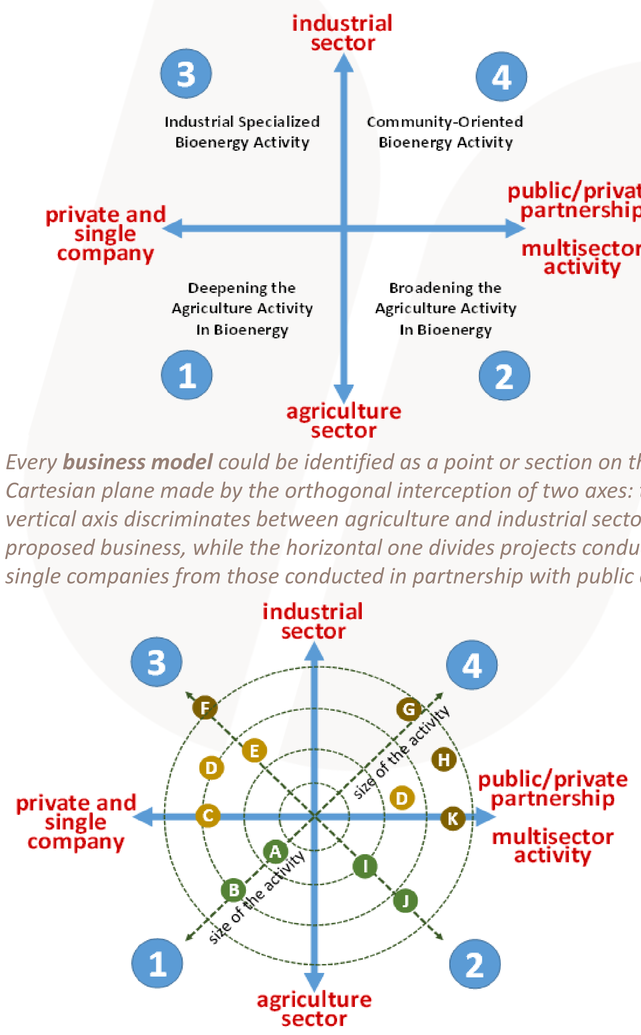


Diagram showing the key actors characterizing the composition of the APPR sector, specifically considering three different branches: a) biomass suppliers; b) biomass mobilization and conditioning; c) biomass conversion into energy (i.e. final energy users).

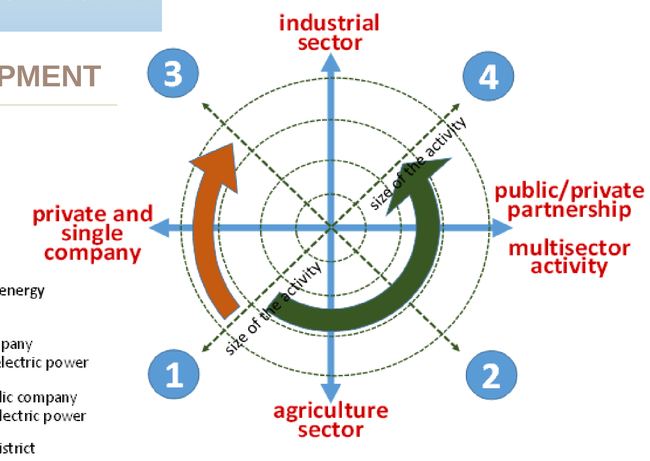
RESULTS: STRATEGIC PLANNING THROUGH THE SWOT ANALYSIS

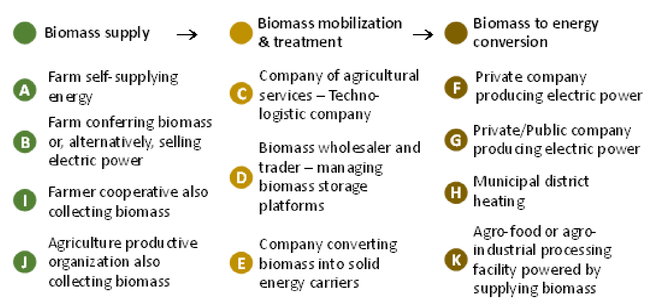


*Every **business model** could be identified as a point or section on the Cartesian plane made by the orthogonal interception of two axes: the vertical axis discriminates between agriculture and industrial sector of the proposed business, while the horizontal one divides projects conducted by single companies from those conducted in partnership with public entities.*



TRAJECTORIES OF DEVELOPMENT





According to the diagram, two opposite strategies of APPR sector development can be identified.

*The **first trajectory** (brown clockwise arrow), from (1) to (3), is the "shorter" path to **"industrial specialization"** of large power plants.*

*The **second trajectory** (green counter clockwise arrow) is the path to **rural development**, from (1) to (2), followed by the development of the community at large, from (2) to (4). This "longer" path is based on the vision of a "distributed" model of energy generation and use.*

CONCLUSIONS

*One specific goal of the "uP_running" project is to favor awareness, connections and mutual collaborations, firstly at regional level, in order to promote an aggregation process ("**seeding**"), stimulate new production chains ("**fertilizing**"), and supporting these initiatives in their starting period ("**tutoring**") through demonstration, training and consultancy.*

*The **Sector Analysis** and the **Action Plan** conducted at regional level were crucial tools in this respect. The next step is to apply a similar approach at national and EU scale.*

PROJECT PARTNERS

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