

Result of the SWOT analyses, internal and external issues characterising biomass supply chain for firewood in Western Macedonia, Greece

Internal strengths

- S1. Bordering – strategic position, introduction of raw materials from the neighbouring countries
- S2. Increasing demand from the domestic sector for biomass heating
- S3. Urban areas located very close to rural areas (reduces logistical problems for domestic and small scale supply)
- S4. The quantity of wood harvested from a forest per year, is always less than the annual increment (sustainability)
- S5. Local/regional availability of feedstock
- S6. Short transport routes in procurement and distribution

External opportunities

- O1. Scope for increase and more efficient use of the regional biomass resources
- O2. Promotion of education and training programs emphasizing on new technologies and skills
- O3. Emerging fire wood market also due to the high petrol taxation
- O4. Oil and gas suppliers exposed to the insecurity and price fluctuations of international markets

Internal weaknesses

- W1. Uncertainty of regular biomass yield (due to forest wildfires, illegal logging etc)
- W2. Low training and specialization of manpower
- W3. Lack of mechanized harvesting for wood (difficulties in establishment of supply chains)
- W4. Most promising biomass value chains, including current/future market volumes/prices, not clear
- W5. Old legal framework. Wood harvesting is only allowed to forest cooperatives in public forests
- W6. Small amount of manufacturers of biomass systems(e.g. boiler manufacturers)

External threats

- T1. Development efforts often restricted due to lack of financing instruments
 - T2. Public is neglecting principles of sustainable development
 - T3. Fast implementation of other renewable energy technologies feeding the market requests
 - T4. Perception that technology is old and unattractive
 - T5. Changing governmental policies
 - T6. Economic change and volatility in fossil fuel prices
 - T7. Illegal logging due to the economic crisis
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