

## FOCUS GROUP 31<sup>st</sup> March 2015

### VALDIERI (CUNEO)

On 31<sup>st</sup> March 2015, Valdieri (CN), EURAC Research of Bolzano and CRA-MPF of Trento, in collaboration with University of Trento and Natural Park of Maritime Alps, held a public meeting with administrations, associations, public authorities, citizens of Gesso and Vermenagna valleys.

The meeting collected participants' opinions about possibilities to develop hydroelectric and forest biomass power in Gesso and Vermenagna valleys, consider balancing between production and environmental protection.

This brief report synthesizes contents of public meetings (round tables) organized on two topics: (1) strategic aspects to improve local forest-wood chain and (2) current situation and future development of hydroelectric power in Gesso and Vermenagna valleys.

### FOREST BIOMASS POWER

Strategic aspects to improve local forest-wood chain in Gesso and Vermenagna valleys.

#### Participants:

Studio Associato Fortea

Lipu di Cuneo

Giordanengo Legnami

Alpiforest - società agricola cooperativa

Impresa boschiva di Viale Fabrizio

Gestalp di Val Varaita

Parco Naturale delle Alpi Marittime

The round table concentrated on the identification of main problems and future development potentialities of local forest-wood chain in Gesso and Vermenagna valleys.

At the beginning of the meeting, results of “recharge.green biomassfor” model were showed. According to the model, the availability of wood materials for energy use is about 11.200 MWh/year, using public forests (requirement of 500 families) or it is about 28.300 MWh/year using also private forests (requirement of 1500 families).

Participants engaged in discussion about local forest-wood chain. Main topics central to the discussion were:

- ✓ Forest biomass was used historically in the Gesso and Vermenagna valleys. The need to start using it again is perceived as important by participants. Forests have been managed to maximize energy return, with the presence of beech and chestnut trees being increased.
- ✓ Most local forests are more appropriate for valorization of forest biomass power than for timber. Timber is available in some small areas where there is high quality larch and chestnut.
- ✓ Participants need to manage forests actively. There are greater cumulative benefits to be derived from managing forests than from not managing them.
- ✓ Participants identified the problem of forest mobility and the need to solve this through discussion with the Piedmont’s regional government. To improve the local forest wood chain, the time taken to authorize forest mobility permits needs to be shorter.
- ✓ Highly complicated and inefficient bureaucratic processes limit forest activities.
- ✓ A commercial market for wood exists but there is no guarantee of dedicated funding for a power plant. The siting of plants should ensure that there is a very short chain from forest biomass harvesting to energy consumption. A small power plant in each municipality would thus be better than one with more installed power.
- ✓ Most of the participants prefer internal local investments to cover incomes in the local area.
- ✓ The impact of biomass use for energy on the hydrological protection service is not positively perceived by participants, for example, locating power plants on river banks.

- ✓ Participants asked for there to be active management of private forests, and also of biomass use for energy production. The involvement of private owners in this is not simple because private ownership is fragmented. European Union Due Diligence (Reg. 995/2010) could improve the interest of private owners to stipulate contracts for forest management.
- ✓ Selling off wood that has been allocated for civic use causes problems in that it decreases the availability of wood to the local inhabitants and decreases market prices.
- ✓ The presence of a forest service favors legal work and legal production, as was well understood by participants
- ✓ Biodiversity is an important element in the protected area. Improved environmental communication about the goals and actions of the Maritime Alps Nature Park is important to protect biodiversity and to avoid misunderstandings between the inhabitants and administrators of the area.

#### KEY WORDS

*Forest - management - local area - energy - bureaucracy - short chain - civic uses - biodiversity - communication*

## HYDROELECTRIC POWER

Current situation and future development of hydroelectric power in Gesso and Vermentagna valleys.

### Participants:

Parco Naturale Alpi Marittime

Comune di Roccavione

Comune di Vernante

Enel produzione

Carbocalcio cuneese

Impresa di Livio Bella

The round table discussion concentrated on individuation of main problems and potentialities of hydroelectric power. The following were the main topics discussed:

### *WATER RESOURCE*

Hydroelectric power production has positive influence on local area thanks to state fee given to municipalities, even though this has decreased following disagreements between administrators and producers. According to participants, installation of hydroelectric plant can have some advantages: employment, clean energy and local management of resources.

Hydroelectric power production, if well managed, is compatible with nature. Does it survive without subsidies?

### *SUBSIDIES*

Subsidies play a strange influence on energy market, as it happened to photovoltaic plants in Italy. However, subsidies decreased photovoltaic prices for in-house consumption.

Return time of investment should be around 10 years. With in-house consumption and energy sell/distribution from producer to consumer, subsidies could be decreased or deleted. In this way, a better price could be established between producer and consumer decreasing energy price for both.

### *BUROCREACY AND PLANNING*

There is not a clear planning in hydroelectric sector. Important issues are linked to environmental problems (environmental flow, water quality), social costs connected to the missing results of Directive 2000/60/EC and long time to have authorizations for new plants. Bureaucracy to reach authorizations about hydroelectric plants is too long for producers (till 7 years). The risk is to increase costs for the realization of new plants. Furthermore, there is not the coherence of decisions between several institutions (Municipalities, Provinces, Regions). This creates uncertainty in decision-making.

Municipalities have low influence in the decision-making process. They could promote their selves projects of new hydroelectric plants but they do not have enough funding.

### *NATURAL PARK OF MARITIME ALPS*

The construction of new hydroelectric flow plants in Natural Park of Maritime Alps is prohibited, but there is the possibility to use water already channeled (water main or agricultural drain).

Detailed analysis should be done on environmental flow requested by [Piano di Tutela delle Acque](#) (regional law). In protected areas, a higher environmental flow, with respect to the regional minimum, is required for hydro plants, as in Gesso River, Tetti Gaina, in Valdieri town.

### *MFD - Minimum Flow Discharge*

Water quantity should be assessed case-by-case; sometimes, minimum flow discharge should be decreased or increased for maintaining the acceptable standards for water quality and for increasing energy production.

The high availability of water in Gesso and Vermenagna valleys is an essential resource to produce energy.

Minimum flow discharge is important for flora and fauna. Environmental protection is useful also for tourism and recreational services: the most important touristic place in Gesso and Vermenagna valleys is Limone Piemonte, while the S. Giacomo area is used for walking by inhabitants. Take more attention to water quantity in these areas is important to add landscape value.

Water quantity is important also to avoid problems associated with volume of waste water discharge. Somewhere water flow is decreased for agricultural uses (Sant'Anna weir), according to [art. 9, D.P.G.R. 17 luglio 2007, n. 8/R.](#)

### *FISH PASSAGES*

Fish passages are different based on fish species. During the round table, participants discussed the landscape impact of fish passages. The effect of fish passages has doubled: on one side, passages guarantee river continuity; on the other hand, they create the possibility to climb to no native species. However, natural discontinuities exist, as waterfall (Tetti Niot) that decrease the river connectivity.

Plant Managers have many problems to build fish passages, but they ask a better coordination and planning of all the authorization process.

### *RIVER CONTRACTS*

River contracts are tools to manage hydro resources in participatory and negotiation ways. Participants underline the risk to delay planning and management with river contracts. This kind of process is sometimes slow and inefficient. In Gesso and Vermenagna valleys there is no case of river contract.

## *CONSUMPTION*

Local enterprises use a high quantity of energy and they could save through the direct management of hydroelectric plant. In addition, participants highlight the importance of short energy linking between producers and consumers.

## *PLANTS ON MAIN OR SECONDARY CHANNELS?*

Current plants are in the most feasible river areas. Future plants will be built in areas more distant from infrastructures (streets, grids, ...). For this reason, hydroelectric producers prefer to use places in which the head or the flow rate are higher and, consequently, the annual energy production.

In the case of secondary or agricultural channels, the situation is usually different: infrastructures are closer and micro-hydroelectric plants have an economic gain. Furthermore, environmental impacts are less, because water is already channeled. The main environmental aspect to take into account is that water-use concession can change with a decreasing of water in the main river due to the different use of water.

In particular, some problems are recognized in the possibility to build new hydroelectric plants in the Baus agricultural channel. In this case, new hydroelectric plants can not work because there is not enough water. The water is channeled for agricultural reasons and left outside the pilot region.

## *MUNICIPALITIES*

Municipalities do not have the possibility to invest for hydroelectric power production in Gesso and Vermenagna valleys. Municipalities receive fees from private producers.

## *KEY WORDS*

Employment - Investment - Production - Water - Bureaucracy - Uncertainty - Minimum Water Flow.