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**ENERGY AND CLIMATE SESSION**

**Territorial smart growth and renewable energy :the case of micro and mini hydro energy in Veneto region.**

The floods that hit the territory of Padova and Vicenza in early November of 2011 has dramatically brought to the forefront the long-standing problems of hydrogeological disruption and related planning issues. It is rightly claimed that the causes are also amputated to wild urban development in recent years and to the fact that in the absence of a hydraulic culture, rivers tranship for causes amputated to historical reasons as well as to the absence or poor maintenance of levees, and climate change already acting. The tendency is therefore to propose a series of works to contain the floods of the rivers, such as the construction of reclaimed areas, and then ,once again, is the culture of emergency to prevail.

This paper instead , analyzing the micro and mini hydro sector in Italy,( the theoretical potential capacity of small hydro in Italy, that is 3000 MW, represents an increase of about 15% by 2020), offers an alternative to traditional and harmful way to plan, and also demonstrate the economic suitability of this particular source of renewable energy, infact it examines the possible use in solving problems related to flooding, like : restoring the landscape and the bordering area ,taking into account the energy demand that will rise in coming years, and then in a perspective of long-term sustainability.

The measures envisaged to tackle the flooding problems can not be linked to the short term, but in the long term also, avoiding higher charges.

This choice could’nt be considered sustainable and goes against the economy of resilience and mitigation. Conclusion: there is a need for a better governance, stakeholders involvement, and preparedness, otherwise we have to indulge in usual costly and partial emergency responses. Even if something is going on, it’s foreseen to work with the Meteorologic company ,for early warning services, we need to plan for the territory better and implementing an energy policy that takes into serious account the diversification of sources and choices related to the built-up areas and not, in line with The Durban COP Adaptation Charter , impacts of climate change can only be addressed through development promoting human welfare, ensuring ecosystem integrity and a new greener economy, with the concourse of renewable energies at local level too. the Mini and Micro-Hydro energy sector supporting the activities of Veneto landscape restore and development ,could bring a new way of planning ,for the long term, helping to resolve the issues intelligently , integrating flood and hydrogeological disruption causes and finding resolutions.