



Sharing benefits as a key for social acceptability – experiences around the world

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ABSTRACT

Big investments in energy plants produce social and economic growth. When the investments are based on the exploitation of renewable resources (which are natural and domestic), these two advantages are joint with environmental sustainability and positive effects on the balance of trade in developing Countries with energy deficits.

These are common sentences that are widely shared at National level. At that level, it is easy to find an excellent social acceptability of investments in renewable energy.

Unfortunately, renewable energy sources generally have the characteristic of not being transported or stored; they must be exploited where they are and when they occur. Therefore, renewable energy plants must be built where the resource is, i.e. in places that do not necessarily have an “industrial” inclination...

Thus, the problems with social (societal) acceptability occurs at local level, even if at the macro-social or at national levels they would seem to be solved. Sometimes the basis of the dissent is economic or cultural, but more often the local community expresses environmental concerns.

The presence of the resource is everywhere pre-existing to the decision of the investment, sometimes to a noticeable extent; probably its exploitation, in different forms, is already part of the local culture. Nevertheless, when a new investment is proposed, often it faces a strong opposition.

So, we can face the strange situation of a clean, green project that encounters hostility mainly for environmental reasons... What I have described so far is true for every renewable energy resource, but especially for geothermal energy. I mainly refer to “deep” geothermal investments for electric power generation.

If, therefore, on a rational social and cultural level, the sustainability of renewable energy resources is universally celebrated, why at the local level it becomes so harshly opposed?

The motto “*think globally, act locally*” is a well-known slogan of the environmental associations worldwide; but in practice it seems that “*locally*” must be banned the same investments that are “*globally*” wanted due to their values of sustainability. For people working in our sector it is a strange but diurnal experience.

Usually, the blame of such a situation is put on a lack of communication.

This is certainly true. But the experience shows that investing in announcement rarely gives good results. This is because any technical, scientific and cultural information clashes today with a large mass of disinformation; if it is due to good or bad faith, it doesn't matter: the effects are the same. Scientific and technical world is nowadays facing a widespread feeling of diffidence, and the situation is getting worse... Paraphrasing the postulate of Newton, one could today enunciate a “third principle of the scientific information” according to which, for every scientific statement supported by long and exhaustive experiments, there is always at least someone graduate in some similar discipline who, providing results of empirical checks, is able to assert the contrary, obtaining a large and fair credibility.

Just remember that in the present days a Minister of Health of the Italian Republic is questioning the validity of vaccinations and just declared polio vaccination as “optional”. With all due respect to the efforts of Jonas Salk and Albert Sabin...

Consequently, the problem of the social acceptability of investments in renewable energy must be undertaken from a different and much more material point of view. Ultimately, the question that is implicitly put is really simple and already well-known; it is strange that it does not find an adequate answer. It is: “*if it is true that the proposed investment has enormous economic, social and environmental benefits for the whole community, why all the discomfort, however small, I have to suffer it in my backyard?*” ...

So, the only investment that is suggested to be pursued is not in information or culture, but in a proper distribution of the benefits of the investment. To do so, geothermal energy has an advantage on the other sources, and is the possibility to share waste heat for direct uses, having great results in social and economic development of the region, devoting a neglectable sum of money.

The present paper describes three circumstances that derive from personal working experience in three different regions: Italy, Andean Region, Kenya.

Three different tactics are shown:

- A territorial marketing project, based on Italian (Tuscan) traditional food, whose desirability on the market is amplified by the sustainability of the production processes, due to exclusive combined use of genuine ingredients AND renewable energy.
- An isolated smart grid, to give renewable energy to the “pueblos” scattered on the Andean plateau, able to sustain an economy based on traditional handcraft and new businesses linked to the distinctive environment.
- The development process of a Maasai community based on cultural heritage (related to volcanism) and geothermal resource, to accompany them through a deep cultural transition.

Using the “Sustainable Development Goals” table and some technical considerations it is here shown how geothermal, in each case, can induce perceivable and ethical development for local communities.

Unfortunately, despite of the sharpness of strategies, none of the three experiences represents a clear successful case, in terms of social acceptance... it is reported as in all the three cases, a hard opposition is still present.

So, this paper is more useful to highlight errors, rather than to point out a good practice...

But it is nevertheless evident that setting up *at least* one successful initiative, which could be the benchmark for good practice and be communicated as an example; shortly: an example which could in the future clearly demonstrate how a local community will have conquered a valuable and durative sustainable development due to geothermal, is in the interest of the entire geothermal community and not just of an individual investor.

This is why the geothermal institutions must continue financing demonstrative projects as those three here shown.