

SESSION 3. ADDRESSING ENVIRONMENTAL CHALLENGES THROUGH INNOVATION:

"Business angels, venture capital and clean technologies"

Paolo ANSELMO: IBAN & INSME President

During next 15 minutes I will present my point of view, as investor, concerning clean technologies financing.

Since the beginning, I want to underline that governments commitment are always strongly required if the objective is to boost green economy becoming a new investment's frontier. IF governments support eco financing by risk capital industry – risk capital industry will do more investments AND it will encourage more entrepreneurs to find new viable business.

WELL let me start with some figures concerning Finance and Sustainable Energy market analysis (S.E. include both renewable energies sources and energy efficiency) market analysis. Source Italian National Agency for New Technologies, Energy and the Environment (ENEA)

In 2006:

- The amount of \$ 100 billion = concern the total financial transactions relating to the sustainable energy sector
- \$ 70.9 billion = are intended for new investments, an increase of 43% compared to 2005

AND the positive trend is still remarked in 2007

In 2006 the investments made by the risk capital industry (Venture Capital and Private Equity) has achieved, globally, the figure of 7.1 billion dollars, an increase of 163% compared to 2005.

In the same year European companies have raised, from risk capital players, \$ 1.8 billion against \$ 4.9 billion of U.S. companies.

HOWEVER, Europe prevail in investment stockbrokers segment (\$ 5.7 billion against \$ 3.5 billion in the United States).

In this growing context, emerging countries like India and China, within three to four years, are designed to achieve the European figures.

Growth in investment flows indicates a clear change of the financial players attitude towards sustainability energy industries AND the expectations of relevant revenue in the renewable energy sector by the financial community.

Today we can assume that investments in research and technological innovation PLUS diffusion and experimentation in several countries HAVE allowed an increase power LINKED to an efficiency of plants that only ten years ago were unthinkable.

In light with current market conditions and strong political support to the renewable energy sector, it is expected that the contribution of renewable energy production in Europe in 2020 will reach the 21% of the total amount produced. The areas where we should achieve the most significant increases are: wind, bio fuels, photovoltaic, solar thermal and biomass.

What about the main challenges regarding clean technologies in Italy and its financing

Generally speaking Italy follows the European policies and measures concerning sustainable development.

All the normative existing aim to prevent climate change and to set up the key recommendations included in Kyoto pillars:

- renewable energy: electricity generation – heating and cooling
- energy savings and energy efficiency
- emission trading (including technologies to reduce CO2 emissions)

The government strategic vision consist in:

- transforming the current Italian fossil fuel based energy system in a more sustainable one, based on a diverse portfolio of renewable energy sources locally available
- AND in increasing the competitiveness of the Italian energies industries: MORE active carriers committed in energy efficiency

In order to achieve these objectives a national energy plan has been set up.

Referring to 2007 financial law 2,7 billion euro are available for technological and non technological actions. The expected impacts are:

- To raise overall RTD investment (with the aim to develop a broad portfolio of technologies in order to spread risk and avoid locking-in), ALWAYS promoting public/private partnership
- AND to address obstacles for deployment and accelerate market penetration (B2B and B2C approach)

As you know the renewable energy sources locally available (solar and wind power, biomass, geothermal) are generally more expensive and/or environmental impact ant.

So, currently, the European States use various non technological instruments to achieve the target set for the electricity produced from renewable energy sources

In Italy the promotion of renewable energy sources, that has formally started in January 2002, include a mix of different incentives system:

- feed in tariffs
- quota obligations connected with “green certificate tradable” system
- fiscal incentives and subsidies (anyway limited to the consumer market)

Incentives are required as the technical-economic conditions of access and interconnection to the nets electrical workers are usually high and complex to set up (due also to an existing monopoly regimen)

At the general level in order to push a local economical growth in sustainable energy sector some typical points of strength are required.

In Italy, we can underline:

- an existing government leverage (both policy & regulatory measures) for market growth, which include the incentive system I present before
- a good certainty for the investors community as the system is perceived as stable in the short and long term (10 years ahead appears to be the minimum horizon, which is already a long period from a political point of view)
- a positive role played by the Banks system: as the most important banks are active in the field with dedicated business units

- a well know Italian best practices in manufacturing process improvement and industrial scale application of research results WHICH offer interesting opportunities to venture capital perspective
- an emerging demand pull (the Italians are more and more careful to the energetic problems and more and more available to engage themselves in the exploitation of renewable energy sources. In particular, beyond 4 Italians on 10 – with a meaningful increment regarding the past – are disposed to invest in systems for production of renewable energy to be used in domestic servant. Please note that the domestic use represent nearly the 80% of the total consumptions).

Some successful results have been achieved:

- In Italy, in 2005, the gross output from renewable sources grew at a sustained, standing at 49,920 GWh. An increase of 18.6 percent for wind energy, 18.8 per cent for solar energy and 21.6 per cent for biomass and waste.
- International Investors start to consider Italy as a growing market. Swiss Bank Sarasin estimate an average annual rate growth of 58% over the period 2004 to 2010

But the investments done by the VCs, which are always essential to promote all forms of innovation, in Italy are still marginal (the major environmental technology market in Europe are Germany, France and UK).

Some figures concerning 2007 coming from AIFI (Italian Venture Capital and Private Equity Association).

Globally, the number of deals is 302

The total invested amount joint 4,2 billion euro

Deals concerning energy sector are only 17

The amount invested is 70 million euro

In my opinion the point of weakness exists due to an **existing grant mentality** (nearby the company founder's and managers), a financial sustainability of the business model (sometime difficult to demonstrate) and the asymmetric company valuation (between entrepreneurs and investors)

Secondly **new business model** need to be developed; for example a key area in which the increasing application of renewable energy will lead to a genuine **revolution** in the area of energy production concern the issue of distributed generation. Thanks to technology it is possible to locate clean energy production close to the places of use thereof (distributed generation). This practice makes it possible to reduce, if not eliminate, the costs of transport, as well as improve the quality and reliability of the distribution system.

Let me conclude with a brief presentation of IBAN and its activities

As a short overview, IBAN is the National non-profit Association for the Italian's Business Angels and Business Angels Networks, established with the support of the European Commission in march 1999.

IBAN is focused mainly in:

- highlighting the contribution business angels makes to the entrepreneurial culture
- promoting the recognition of Business Angels Networks (BAN's) and organised angels groups
- lobbying government

- and encouraging the exchange of best practices and experiences between members.

The membership of the Association, today more than 100 members, includes:

- Business angels
- 2 national thematic networks (Life Science and ICT) plus 9 regional local networks (AND more than 200 angels are connected to them)
- Public /private entities having an involvement in promoting risk capital

Following a survey done last January, the figures concerning the visible part of the Italian informal venture capital market in 2007 are quite encouraging:

- Business angels involved: 300 (110 answers received)
- Business plan evaluated: 635
- Number of successful deals: 102
- Percentage of deal concerning renewable energies: 11% - A RELEVANT increase compared to 6% of 2006
- Average amount invested: 185.000 euro
- Total invested amount: 19,5 million euro

Let me conclude with 2 solutions chosen and supported by IBAN regarding the financing of clean technologies:

- The first one concern the creation, in the next months, of a national BAN fully dedicated to clean technologies investments
- The second is the project so called IAF – Italian Angels Fund – a co-investment fund with angels and other institutional investors acting in Italy for innovative companies funding the pre seed and the early stages phases. IAF will be a 60 million euro matching equity fund which can invest between 50.000 and 2 million euro. Based in Milan, IAF will act nationally with some local satellites nearby actives research centres (generally located in regions with high level of R&D spend per capita and GDP per capita). It is expected to devoting between 25% and 40% to green technologies investments.

In conclusion

Certainly, BA and VC can represent the ideal tool to promote sustainable energy in start up projects with high innovation or creativity AND prospected added value

But due to the high risk plus the initial low profitability of the investment a government's support is strongly required.

Please note 7 recommendations

1. Emphasize the green economy role AND develop a green public procurement purchasing
2. Set policies to create the market and incentives (i.e. beneficial tariffs for a long period: from 10 to 20 years) – provide incentives to implement policies (governments should help and stimulate customer demand – THIS will be followed by corporate investment in technological development to meet the demand. If companies and investors believe they can make good returns they will invest and finance clean technologies)
3. set more R&D activities incentives for technological breakthrough materials and devices, involving universities AND linking education on climate change issues to notions of business. A well established business driven public/private partnership roadmaps (brain power and skills clusters with finance) can optimize the manufacturing process and reduce the costs of demonstration phase and technological improvement

4. accelerate entrepreneurship (educating engineers – funding small companies – improving investment conditions for VCs and BAs)
5. create larger /lively financial market (i.e. creating an asset management fund passport to facilitate cross border investment)
6. simplify and / or set up specific state aid rules
7. **AND FINALLY, ALWAYS AVOID PANIC MEASURES ADOPTING LIGHT AND CLEAR REGULATIONS**