# LENR-Cities SA was established on August the 8th 2014 in Neuchatel, Switzerland



Michel Vandenberghe, one of the founders of LENR-Cities, answers our questions. The LENR-Forum team has been following this project since 2012.

### Context

Alain Coetmeur. "Cold fusion", alias LENR (Low Energy Nuclear Reactions) knows of new developments showing signs of increasing support from the industry, government agencies and a variety of entrepreneurial initiatives. LENR-Cities is one of the most atypical initiatives, in so far as it isn't concerned with a reactor, or even a (research) laboratory, but the development of an ecosystem in order to move the LENR project forward.

Michel Vandenberghe and Didier Pelluet launched LENR-Cities in 2012. George de M. joined them in 2013 and a small team following that.

Michel and I met on the social network Viadeo, following an article by NASA which was posted by a French person, living in California, on his forum entitled "Smarter Cities". Since then the LENR-Forum team has had informal contact but has been monitoring LENR-Cities with the combined wish to promote the adoption of this technology.

Michel has already been interviewed on LENR-Forum and has already presented the concept of the ecosystem, but it is clear that this concept doesn't come under the umbrella of traditional set-up situations. It is worth explaining the concept again, as well as the progress the project.

The community of LENR "activists" who are keen for the LENRs to develop quickly, expect reactors to be sold in hypermarkets, or at least LENR electricity, with cars powered by LENR and, of course, the famous "LENR teapot".

We are convinced that LENR is one of the main innovations which is going to change the world, but that this will not happen without opposition from both the academic and economic worlds.

How will LENR-Cities change the situation? How is the project progressing? These are the key questions addressed in the following interview.

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Alain. Hello Michel. Michel. Hello Alain.

- **A.** You postponed our May meeting to the beginning of July, but here we are. I'm looking forward to finding out all about the LENR-Cities project today.
- M. I'll do my best to answer your questions.

# The following is a summary of our discussions.

## 1. What is your proposal?

- **A.** What is LENR-Cities proposing?
- M. In practical terms, LENR-Cities wants to regroup into one project scientists, industrialists and investors in order to redefine the challenge of energy. We are designing this project and the organization of market in order to achieve this. The end result is to create new markets within the energy market.
- **A.** Which kind of market organization?
- **M.** An ecosystem. We organize the capabilities amongst participants in the form of win-win offers and we link them up together in the form of a global offer destined for the partners and clients of the ecosystem.
- A. Can you define the term "ecosystem"?
- **M.** The easiest way to explain this is by saying a group of players who, as associates, create an adapted environment for their development, that is to say, for the development of their activities.
- **A.** This goes beyond the ideas of networking, collaboration and cooperation.
- **M.** Yes, we have been working and experimenting on this development model for years and we now have a firm approach.
- A. Is the ecosystem an enabler?
- M. Yes, the objective is to develop a LENR technology offering and to share the capabilities of industrialization in order to multiply its applications. The purpose of the ecosystem is to ensure the development of each participant's activity, including those of LENR-Cities, and the whole forms the core of an LENR industry. We have to bear in mind that developing an ecosystem is itself a project.
- A. Does LENR-Cities have a particular expertise in the development of the ecosystem?
- M. Yes. Our team has been working on this requirement for years. We have firm experience of this with the objective of reducing the risks for each player while increasing the value of the offers of each one of them. We have taken part in many disruptive projects and this objective is central to it.
- A. So therefore your job would be to develop an ecosystem for LENR.
- M. Yes, on the condition of fully understanding the meaning. Creating and developing an ecosystem for LENR comes down to creating a market, its core, for those players who have the ambition of developing an LENR industry. For this we are designing, developing and marketing tools and products in order to align/line up the interests of all the players within a network of projects.
- A. You would like to become a new type of market operator?
- **M.** Sort of. In order to put a name to it, we talk about "Venture Industry".

## A. You use the term LENR in a generic way.

**M.** We use the term LENR in order to refer to a collection of applications of a new engineering of Matter, developed by extending nanotechnologies and the science of materials, and applied to energy, transmutation, supra-conductivity, and the production of hydrogen or the direct production of electricity. This is not an exhaustive list. The applications of this technology are multiple and the markets are huge. They affect all sectors of activity, opening up new markets.

### **A.** Why the name LENR-Cities?

M. A town is an ecosystem and our aim is to create a fusion point in order to bring it to life.

## A. I think I've understood your project.

**M.** Officially, the following is what you will see in the statutes of our company. The company designs, develops and markets both tools and products destined for the economic and commercial development of an ecosystem of scientific, financial engineering and industrial activities. And its mission: this ecosystem is working towards the development of an industry taking advantage of the science of materials and matter, and of its applications in the energy market.

### **A.** What does the ecosystem offer its participants?

M. The system offers industrialists the chance to participate and benefit from the outcomes of the ecosystem in order to integrate their offers into an LENR industry. It offers financial investors the chance to take advantage of a new model financing innovation and research, and scientists have the chance to develop LENR and technology within the context of their own projects. All this reduces the risk for everyone involved. The offer of the ecosystem is separate to the participants' own offers. LENR-Cities supports the offer of the ecosystem.

## A. What does the ecosystem offer its clients?

**M.** The system offers its clients the chance to develop their activities within the LENR industry. Industrialists will be able to create a new market within their sector, investors will be able to invest in new markets and scientists will be able to be associated with an ecosystem developing projects with both industrialists and investors.

**A.** This is a proposal which requires co-evolution of a set of offers in the marketplace.

M. For that reason it can only be carried by an ecosystem of innovators and organized as a network of projects.

A. In order to ensure the continuity during a phase of disruptive innovation in a way?

**M.** Yes, any disruptive innovation is a challenge for every company and we are at the stage when the wave of disruptions will affect every sector.

## **A.** What is your proposal?

**M.** Our value proposition is to enable companies to take advantage of their existing competitive positions during a phase where the play of competition is disrupted.

# 2. What is your Unique Selling Proposition?

#### **A.** The ecosystem?

M. Yes, by construction, we are not competing with any other players within the LENR market. We are, in fact, complementary to each of the established companies. Each player needs to develop his own ecosystem. Our proposal responds to this need. We are different because of our expertise in ecosystem matter. That is why some of these companies can be our partners and others our clients. Our partners are those with whom LENR-Cities can develop an open ecosystem in order to spread the LENR market

naturally, and therefore the activity of the ecosystem itself. It's all about creating new industries in the long term.

- A. So this ecosystem is open to all?
- M. The ecosystem gives LENR access to all players to enable them to integrate the LENR industry, the ecosystem being the initial core of the process. A company can choose to be a partner in the ecosystem if this company is able to respond to our win-win offers. Otherwise, this company will become a client. The partner, industrialist or investor, should invest in the ecosystem and the client in the markets developed by the ecosystem. Note that each client can deal directly with a player of the ecosystem but, of course, only on the basis of its own offers.
- A. So every player can therefore have access to the offers within the ecosystem.
- M. Yes, every player should be able to get into the LENR market. This is the means to commit to a massive transition, one of the conditions of accepting the LENR. Think of the internet.

## 3. LENR Technology

- **A.** In order to develop an industry, the development of the LENR must succeed. Are you sure this will happen?
- M. The reality of LENR has been written about in publications for the past 25 years. There is evidence to show that there is a way between chemistry and nuclear science in order to transform Matter. For us, mastering LENR and the development of its market is just a question of time. We're restructuring a future market to remove the current obstacles and accelerate the process. Note that this same approach can be applied to any innovation which will disrupt the current system.
- **A.** When do you see the first applications of this being available?
- M. If conditions are favorable in order to carry out research and get to the last stage, we hope to see the first exploitable results in the next two to three years.
- A. You mentioned the phrase "transform Matter" intentionally?
- M. Yes, as I said in the introduction.

# 4. The market requirements

- **A.** Why have you committed to the development of an ecosystem from the start?
- **M.** When we started to work on LENR, we recognized the profile of a disruptive innovation. We know from experience that showing this is neither enough to demonstrate or to trigger commitment. If, in fact, LENR offers energy at low cost at both production and consumer levels, in plentiful supply and clean, its disruptive nature is an obstacle itself to prevent its acceptance by the players in the market and therefore to its development by anticipation of its impact.
- **A.** In other words, the obstacle comes from the market players themselves. You are talking about the need to remove this obstacle.
- **M.** Yes, questions relating to the development of LENR and its future impact on the market cannot be separated. We have to create a market where this impact would be reduced and find in this market the means to encourage its development.
- A. I really don't see how you'll be able to do that! But the need is clear and universal.
- **M.** Yes, LENR is a perfect example. We will also be able to apply it to other innovations which would shake up the market and especially in order to develop LENR applications in the future.

- **A.** One of these requirements is to develop a new and innovative funding model?
- **M.** Yesterday, you invested to capture market. Tomorrow you will invest in order to make market as yours will disappear. Such a disruption will become the norm and existing markets will be too restricted in a finite and competitive world. It's the unique source of growth.
- M. I found the blog you spoke about during our discussions very interesting.
- A. Philippe Silberzahn on breakthrough innovation. I'll put a link to his blog and his article entitled "Entrepreneuriat, le patchwork fou" in my notes.

## 5. Your approach

- A. You think that the introduction of LENRs would be a major challenge to the players, industrialists or investors, by weakening their offers and investments. That is why they are hindering the development. It is clear that if you know how to make industrialists and investors interested in LENR markets in the future, then things will speed up.
- M. Yes, but first of all for scientists and their technological and scientific companies.
- A. How are you going to convince those who would seem not to be interested?
- M. We are not trying to convince them. Nowadays companies do not invest enough in their current activities because they know that there is a continual flow of innovations which reduce the lifespan of these activities. Above all they should renew their markets and find positions in new markets. We are setting up a business model for this. We believe that the achievement of the LENR is a certainty, just as we have already seen in other groundbreaking innovations.
- **A.** If this is a sure thing, there are no risks?
- **M.** Of course there are, but we need to understand that the basic nature of risk changes. What should you do before and after an event when you know for certain that, by its very nature, it can destroy your market. Uncertainty, and therefore the risk, is the instant when this will occur.
- **A.** At what stage are the technological companies who are already in the running?
- M. These scientific and technological companies imagine they will develop LENR products. However, they forget or do not understand that no classic business model will hold after the first pre-industrial prototype becomes available. That's why they have difficulty in finding the means they require. An investor needs to know how the value of his investment will be increased.
- A. But these technological companies have other allies?
- M. These companies are courted by numerous players who have different intentions, some of whom who want to create this market. But these players have the same problem. It isn't a company-related problem but a market-related problem. In our opinion, an isolated player cannot succeed, as the demand will be greater than the offer of many sizeable orders when the market opens up. Our objective here is to be able to make an offer grow to the level of a market.
- A. So you mean that you cannot innovate without the "complicity" of the market?
- **M.** The process of innovation can be analyzed from the viewpoint of the ability of a company or an individual to convince a market. We can examine this from a more global point of view. We can consider that the market innovates when those who make up this market have a common interest. This gives an important position to organizational innovation and, first and foremost, to the way to achieve this convergence.

- **A.** Today's market would tend to suppress the risk factor by slowing down the development, and you have opted to reduce the risk.
- M. Exactly. We respond by organizing a market the whole length of the value chain that we are restructuring. Our value propositions are specific to each group of players, scientists, industrialists and investors, and our global proposal includes them into a system which makes sense and gives credibility to each one of our proposals with the added effect of reducing the risk for everyone, both within their own business sector and in the marketplace.
- **A.** In the scientific world, the two most frequently causes quoted in order to explain the slowness of development are the lack of collaboration between researchers and the absence of adequate funding. What do you think?
- **M.** The lack of funding is a consequence of the anticipation of those involved. Improving the collaboration between researchers is a determining factor because the multiplicity of studies and analyses show that this sector is interdisciplinary by its very nature. I will add to this list the way of recognizing scientific work, for which we also have an innovative proposal.
- A. How do you think you will encourage this interdisciplinarity between researchers?
- **M.** The interdisciplinarity means that the various fields of research are integrated into a larger domain and it is this domain which we are going to develop and on which our industrialization capacities will based.
- A. What do the scientists think of your project?
- **M.** Those to whom we have presented our project are interested. We certainly hope to present it to the worldwide community in this sector.
- **A.** What are you proposing for them?
- **M.** To make investment in their research projects easier by minimizing their actual risk, with their only obligation being to participate in the ecosystem. We offer several ways of participating. A company can enter into an agreement with the ecosystem via the traditional routes (contract, license) or by way of an innovative model which associates the company with the industrialization phase and its profit.
- A. Funding their research: can you be more specific?
- **M.** We don't finance research projects directly with the exception of interdisciplinary projects. What we offer is to manage the risk for all of those involved. We share the reduction in risk and improve the value of their project with their participation in the ecosystem. We have proposals of actual value for each activity, and in order to benefit from a part of the expected profit, investors and industrialists invest in the ecosystem. Of course, initially, these investments will mainly be in the funding of research projects.
- **A.** Is the ecosystem a company?
- M. No, it is only brought about by an open contract which is currently being developed by LENR-Cities.
- A. LENR-Cities is the ecosystem?
- M. No, LENR-Cities is a company within the ecosystem and its position is also set out in this contract.
- A. What is the name of this ecosystem?
- M. The branding of Energy to undertake. Let's call it the ecosystem for the moment.
- 6. Branding
- A. Want to develop a brand?
- M. Energy is pervasive. It will create a link between multiple initiatives

## 7. Your response

- **A.** Changing the anticipations of players whose products, investments, strategy or power would be called into question by LENR, involves a lot of people. It seems to me to be impossible to change that.
- **M.** We cannot change people's anticipations, especially in the short term. It's not a question of changing the current game but of superimposing another into it which enables us to neutralize the effects of this game by working with interested innovators within a managed environment.
- A. You talk about changing the game at a level of the market itself but no-one is representing this.
- **M.** This is the role of LENR-Cities. We are a player in the ecosystem and we can act in its interests as well as its battle plan by developing an "open business plan" to fund it.
- A. So, in short: you want to create and operate an ecosystem which integrates the activities of a collection of players scientists, industrialists and investors who are all interested in LENR, by offering them the possibility of reaching their own objectives, while creating a global offer which gives value to theirs. Your job is to develop tools and methods to develop this ecosystem and its global offer.
- *M.* That's a very good summary of the situation.

### 8. How it works

- A. So what is your analytical framework?
- **M.** We already have extensive experience with 'social business' models which we are transferring into the research/industry sector. We are working on relations between the share of the value and competition between the players on the value chain.
- **A.** What is the idea?
- **M.** To reduce the risk for each player as far as his own activity is concerned by reconstructing differently the share of the value, while increasing the global value. In the end, we have designed three organizational innovations whose combined effect along enables this transformation of share of the value.
- **A.** And the profits?
- **M.** To set up unique win-win offers amongst the players of the ecosystem. The ecosystem is a sort of open market. We talk about a "market sandbox" as an environment where the organization aligns the interests of the players around the LENR. Each player in the ecosystem finds a market and the capacities in order to develop its own products all at the same time.
- **A.** Your "Market sandbox" is an environment for a market prototype?
- M. It's more like an environment in which to create new markets.
- A. You talk about the partners of the ecosystem but little about its clients.
- M. For that, we need first of all to explain the perimeter of the ecosystem, while bearing in mind that the objective of the ecosystem mustn't be confused with those of its participants. For example, the ecosystem develops the technology but isn't aiming to develop an LENR battery or reactor, although certain participants will.
- **A.** I understand that LENR-Cities has an objective and that the ecosystem has another, as do the participants in the ecosystem and that the ecosystem, as its participants, respond to the objectives of their clients.
- M. Exactly, and to come back to your first question, I would rather phrase it "how do you differentiate between partner and client"? A partner can propose offers of the ecosystem; a client only has access to

the offers of partners of the ecosystem. The ecosystem carries with it its own offers and a partner can only take advantage on the pre-existing conditions of participating in the ecosystem and working with it.

A. So it's both complex and simple at the same time.

*M.* The internal mechanics are complex but the use will be simple.

**A.** Do the partners need to understand these mechanics?

**M.** It is important that our scientist partners remember that we are adapting their offers to the needs of the industrialists and investors and in order to go to market, if they have set up companies, they need to work with industrialists and investors. The same reasoning applies to the industrialists as it does to the investors.

**A.** What are you offering your partners?

M. I'll answer that in an indirect way. We use a model which splits investments into research activities on one side and industrial activities on the other, in order to ensure the necessary independence as far as the scientific and technological companies are concerned and in order to remain open to a wide spectrum of applications. We are developing an ownership model (Open IP) which encourages the sharing of information and interdisciplinary activities among the scientists while safeguarding their own rights. In a second stage, we could develop an insurance product which encourages the conversion to the LENR industry by way of offers of investment in the markets and not in the companies.

A. Implementing this offer will take time.

**M.** Of course. In the main, one of the objectives of the ecosystem is to develop this.

**A.** The skill of LENR-Cities will evolve with the development of the ecosystem?

**M.** Yes, of course, to set a deadline for the development of an area at Neuchâtel in Switzerland for the creation of new activities and to supply the production tools for the LENR industry.

A. This could be the project of a big company.

**M.** No, a project which big companies should be associated with. This is because the governance of the project must be adaptable and pliable at each stage of the value chain as it evolves. Only a start-up situation, or eventually a network of start-up situations, can design and implement the core of such a project.

**A.** What are you offering these big companies?

M. We are proposing that they co-develop a business LENR ecosystem for their particular business sector.

**A.** You talked to me about 650Labs in the Silicon Valley when we discussed the transition to market in order to illustrate this evolution.

M. 650Labs is a good example. This company is ahead of the value chain of companies subscribing to LENR-Cities. The big companies have understood that the digital transition and the speed of this transition don't leave them any other option than to reinvent their activities on a permanent basis. That is to say, in practical terms, to enable the market to integrate their abilities according to the creation of added value which they provide and to do this in very short cycles. In this context, the valuation of science is no longer adjusted. Science should become a player in the market in its own right and this evolution should enable us to fund research differently.

### 9. Your team and your partners

**A.** What is the ideal profile of your partners?

- **M.** Our project is aiming at entrepreneurs who are open to exploring the field of possibilities by moving away from their current products, while being aware of the risks and not the certainties. They would know that a project writes the plan and be able to take advantage of the field and the uncertainties, but not knowing if this is possible. We are talking to other teams working on innovative projects in the scientific, financial and legal worlds.
- **A.** Who are your partners?
- M. We know where we want to end up and we are taking the road as planned, albeit with some detours. The rules of the development of the ecosystem are well known. However, what makes the ecosystem really depends of those who participate. All activities are part of a network of projects which are driven by several teams. We always apply the model.
- A. So let's start with your team, the founder members of LENR-Cities?
- **M.** Didier Pellluet and Georges de M. We are all over 50 years old and this is important as far as our motivation is concerned. Didier is an industrial innovator and is responsible for the industrial component of the project. Georges is our Financial Director. He is responsible for developing our partnerships in Switzerland.
- A. So was Kresenn the first partner of LENR-Cities?
- M. Yes. A start-up company led by Angelo Ovidi. Angelo is not a physicist but he has the unique ability to put together things in this field. He has a key role in the ecosystem and the development of the structure in charge of the interdisciplinary component of scientific activities and we support his own project to develop a European laboratory as we support all projects of scientific partners.
- A. Your project falls within a European context. Which countries are you prioritizing?
- **M.** Italy, Scandinavia, Switzerland and England first and foremost. We would also like to work with our Japanese counterparts. We already have contacts in several of these countries. We have also been contacted by people in Brazil and India.
- A. And in France?
- M. The French system is especially sensitive to change. We would like to see several big companies supporting our project.
- **A.** You won't be able to manage so many things at the same time even if you have access to sizeable financial means and human resources.
- **M.** With a traditional business model, this is highly improbable. This is why the ecosystem and its viral development model interdependently are so important. By construction, our objective is to minimize the scope of LENR-Cities in order to concentrate on the essential elements.
- A. Are you already having talks with big companies? Which ones?
- M. Yes, but it's too soon to name them.
- **A.** In the initial phase of your project, you worked with LENR-Cars and LENR-Invest. What is your current relationship with them?
- **M.** We worked with them on the prototype of our ecosystem. We have a good relationship with Nicolas Chauvin, the President of LENR-Cars, and Antoine Guillemin, one of the founder members of LENR-Invest. We will work together again in the future.
- A. Have you been discussing your project with Jean-Paul Biberian, who is well known in this field?
- M. Jean-Paul is one of the physicists associated to our project. We are in touch with numerous scientists.

- **A.** You had mentioned that LENR-Forum was a partner when you were working on the prototype of your ecosystem. In fact, we've known each other for a while now
- M. Yes, that's true. You are trusted partners.
- A. You told me that you and Angelo have been approached by young physicists.
- **M.** Yes. We would like to help them to carry the torch of a new generation of physicists and chemists who have opened the way.

#### 10. Finance

- A. Have you estimated what funding you require?
- **M.** Yes. We have the funding in place for the initial step. In order to set up the initial ecosystem, we estimate that we need about 2 million euros. In conjunction with this, we would really like to develop an appropriate investment structure for the ecosystem which will require its own finance and we are open to collaborating with partners in this respect.
- A. Have you set up LENR-Cities?
- M. We are in the process of setting up our company, LENR-Cities, in Switzerland.
- A. Are you thinking of opening up the project to private investors and, if yes, what will you offer them?
- M. Between now and our first round, we will be receptive to any serious proposal. We will offer the chance to participate in a real adventure and to make some money. They can also choose to invest in an innovative insurance structure, a project aligned within the ecosystem, led by Jean-Marc Boyer.
- A. Do you have a business plan?
- **M.** Not in the traditional sense, in order to target a market with a value of 6 trillion euros. Our objective is to carry out a first round during the first half of 2015, in order to find the 2 million euros we need. In this scenario, we would have a second round for a minimum of 20 million euros because, at this stage, we would be looking at an industrial project. You may remember that our business is to provide tools for the ecosystem.
- **A.** I understand the importance of your activities model and of its logic for viral development. You will adapt your storyline if you succeed. Your project doesn't follow the standard set-up pattern.
- M. We want to develop a "Black Swan" of the industry and for this, we need help.

# 11. The risks

- **A.** What risks do you have to prioritize managing?
- M. The same risks that everyone faces in a start-up situation.
- A. There is a great risk that the project will fail.
- M. Yes, at the height of its potential value. However, you change the perspective. Imagine that we have been successful. What were the factors of this success? The work of some physicists who made advances which have led to others, some visionary investors who supplied a large handful of euros, two or three large companies who told the market they were interested in this activity sector. Just a few innovators in the right place at the right time. All this is improbable unless you link them together.
- A. As every innovator, you will be leaving yourself open to criticism and a lot more.
- M. There is nothing unusual about that. Bringing value to opinions and actions responds to different logics and ambitions. The past is full of examples. Today we have the Internet and thus a collective memory. Reputations are very quickly made and unmade. More fundamentally, the problem is complex

scientifically. Criticism often concentrates on simple things whereas, by its very nature, the simple things often hide the complexities which escape us.

- **A.** Imagine that a company breaks through with a pre-industrial reactor based on unique technology which is like no other product on the market. What will happen to your project?
- M. If a company could do that, the markets would collapse. If this company were managed by a visionary, it could join the ecosystem in order to avoid this. Otherwise, the technology would be preempted by the UN, for example, and spread amongst its members or, in more practical terms, it would be replicated by a multitude of players, although this would not neutralize the impact on the markets.
- **A.** A member of your ecosystem can decide to work alone when the market has been prepared by the ecosystem.
- *M.* The objective of the ecosystem is also to provide the ability for each to succeed in his own project. In fact, this can be irrational and this is taken into account in our model.

#### A. How?

- **M.** By a basic contractual rule which states that no player can market the offers of the ecosystem and that LENR-Cities cannot market any offers which belong to the participants of the ecosystem. However, note that other companies can be allowed to market the offers of the ecosystem with the same constraint.
- A. You have to give a lot of information to your partners. Isn't this risky?
- *M.* This is teamwork where everyone takes responsibility.
- A. As with all technology, any applications of a military nature must be kept under close control.
- M. Yes, that's very necessary.

## 12. Competitive advantages

- A. If I were an investor, I would ask you what the competitive advantages are.
- M. I would tell you that we are not in competition with anyone because of the very nature of our project, except other players who want to develop ecosystems using a similar model. Then there would be competition in order to be preferred by the players in the market. It's healthy competition, because it drives the market forward.
- **A.** You change the rule making belonging to the ecosystem a competitive advantage and you share new rules with the partners.
- M. That's because this is the model.
- A. What will happen if others were to develop a competitive ecosystem?
- **M.** Do you mean why would we have more success than others working on such a project? I'm not sure how to answer that. If we are successful demand will grow exponentially. It is clear that there will be several ecosystems more or less structured by strategic issues. I know that this needs a particular mindset and for those who have it, the rational is to cooperate.

## 13. Your business model

- **A.** How will you earn money?
- **M.** Only on the additional added value created by the ecosystem. We are not intermediaries. We apply a multi-faceted 'social business' model to research and the industry, which is already well-known in the Internet world. Our revenue will come from a fraction of the investments made by the industrialists (in order to cover our costs the main part goes towards the financing of the research activities), then from

our participation in the industrialization of the technological offer (development of LENR applications). In a second stage of insurance activity, the result which is to provide financial resources to develop new activities through application of the LENR (instead of financing high potential companies you finance high potential markets). Finally, from our own industrial activity aimed at developing production tools for the LENR industry. The model evolves with the project.

## 14. The future

- A. You haven't spoken about the USA, SRI, Industrial Heat and the investment fund Cherokee, and of their possible ties with China. You also haven't mentioned NASA and Boeing and some of the companies working on LENR such as Brillouin Energy Corporation.
- M. Isn't it perhaps time to develop a European initiative?
- A. What are the messages you want to send?
- **M.** We are building relationships with other teams of innovators in the fields of law, economics and finance in particular. We are also counting on them and on the support that the scientific community to help us to implement this new finance model for innovation and research. We would like to work in partnership with universities.
- A. What really annoys you?
- M. The energetics specialists should wholly support the LENR project. The energy transition will be effected by a change in the model of activities where more energy will be produced and used, and there will be thousands of micro-grids and millions of production units to manage. The development in areas will be overwhelmed, with a spread of energy cooperatives and a path to the development of decentralized energy. With small units of production, the development of products will quickly become self-funded.
- **A.** What vision do you have as far as the evolution of markets is concerned?
- M. A new compromise between companies and innovators is an inevitable evolution.
- **A.** What is your long term vision?
- **M.** We need to bear in mind that an abundance of energy also means an abundance of resources, starting with water.
- A. And what if LENR isn't the Holy Grail?
- M. We don't always find what we are looking for but nowadays we cannot avoid trying to find it.
- **A.** Any final thoughts?
- M. When my daughter asks me what this project is, I tell her I'm working on saving the world but I add that I'm not on my own in order to reassure her! This makes her laugh but, at the same time, she knows that this is a real issue.
- **A.** We know a lot about the nature of your project. So we will soon see a more operational vision?
- M. When we have satisfied the first conditions of success which we are currently targeting.
- **A.** What are these?
- **M.** The support of one or two big companies, cooperation with at least one academic player and initial finance. We also want to finalize agreements with key scientists and have one or several partners in order to move the development of our plans forward within the industry.

**A.** What is your timescale?

M. We want to present the first round of our project during the fourth quarter of 2014 and then to investors during the first quarter of 2015.

A. Thank you.

M. Thank you for your time and for your assistance in putting this summary article together.

#### Further reading on key questions:

(fr) Philippe Silberzahn: « La démarche entrepreneuriale consiste non pas à résoudre un puzzle conçu par d'autres, mais à assembler un patchwork avec des parties prenantes qui se sélectionnent elles-mêmes ». http://philippesilberzahn.com/2012/09/14/effectuation-les-cinq-principes-de-la-logique-entrepreneuriale-3-patchwork-fou/

(fr) La compétition est parfois de promouvoir et développer la coopération, qui sinon détruit plutôt de la valeur. http://angrybearblog.com/2014/06/nassim-taleb-two-myths-about-rivalry-scarcity-competition-and-cooperation.html

(fr) Un investissement borné, des pertes acceptables, et des gains imprévisibles et non bornés. http://www.contrepoints.org/2014/03/18/159966-entrepreneuriat-le-raisonnement-en-perte-acceptable

Nature Scientific Report: Evolution of "Networked Minds" - Scientists show that a Fundamentally New Kind of Economics is Needed.

http://www.futurict.eu/news/nature-scientific-report-evolution-networked-minds-scientists-show-fundamentally-new-kind

Institute of Venture Science is designed to invest in the high risk, high reward approaches that are likely to yield important scientific breakthroughs <a href="http://faculty.washington.edu/ghp/images/stories/documents/instituteofventurescience.pdf">http://faculty.washington.edu/ghp/images/stories/documents/instituteofventurescience.pdf</a>

Disruptor proof point par "650 labs" <a href="http://www.650labs.com/disruptor-proof-points/">http://www.650labs.com/disruptor-proof-points/</a>

((fr) On retrouve des concepts clés dans les œuvres de Norbert Alter sur « l'innovation Ordinaire » ou ceux de Nassim Nicholas taleb sur « Les Cygnes Noirs »

Books and articles by Edmund Storms, scientist, with M McKubre and JP Biberian, who have/has a wide perspective (of the field).

Essential reading:

His book "The Science of Low Energy Nuclear Reactions":

http://www.amazon.com/Science-Energy-Nuclear-Reaction-Comprehensive/dp/9812706208

His review « Status of Cold Fusion (2010) »

http://lenr-canr.org/acrobat/StormsEstatusofcoa.pdf

Further reading for a historic perspective:

The well known/respected book by Charles Beaudette, « Excess Heat »:

http://iccf9.global.tsinghua.edu.cn/lenr%20home%20page/acrobat/BeaudetteCexcessheat.pdf

 $\textit{Various articled by Jed Rothwell in his role as * \textit{guardian of the library *} ~ \underline{\textit{http://LENR-CANR.org}} ~ A \text{ wide and historical perspective}$ 

(fr) L'épistémologie apporte des clés et en particulier Thomas Kuhn avec « Structure des révolutions scientifiques », bien résumé ici:

http://mip-ms.cnam.fr/servlet/com.univ.collaboratif.utils.LectureFichiergw?ID\_FICHIER=1295877018064

(http://www.uky.edu/~eushe2/Pajares/Kuhn.html

The works of Roland Benabou on « group thinking »: Collective Delusions in Organizations and Markets » <a href="http://www.princeton.edu/~rbenabou/papers/Groupthink%2010M%202012\_07\_02%20BW.pdf">http://www.princeton.edu/~rbenabou/papers/Groupthink%2010M%202012\_07\_02%20BW.pdf</a>