

The next EU Hitachi Science & Technology Forum to speed up the Sustainable Society

Hitachi is organizing its 10th European Science and Technology Forum in May. This year the subject is particularly exiting: "Energy, Environment and Sustainable Society: Impact on European citizens", it is really a topical problem for our society.

As far as transportation is concerned, the solution is not so obvious and anyway not unique. Roughly speaking, the challenge is to do progressively without oil. Over the world, a lot of people are working on that subject. Apparently the possible solutions are well known: for example bio fuels; diesel engines were created by using bio fuels but today, more than one century after, bio fuels remain very weak; the same with electric vehicles using batteries: they were running at the end of XIXth century but it remains a niche market today. Other people talk about hydrogen and fuel cells, supplying electricity directly into the car on request, but today we can see only some expensive demonstration models (remember that fuel cell was invented in 1839!). Finally, one can assume that no "silver bullet" solution exists to solve the problem of energy and environment in the transport sector. The so-called solutions are not so simple to develop nor to implement.

I am expecting from the forum, to have open exchanges between all the concerned persons, to get from the specialists updated information of the conceivable technologies and to discuss about the role of the actors as energy suppliers and energy users and the authorities.

I hope to leave the Forum with more clear ideas about this subject and what I can (I must) do to promote a Sustainable Society.

Pierre Beuzit



Editorial

Organizing the EU Hitachi Science & Technology Forum is always a great thrill for us and during the phase of identifying potential speakers and moderators we get the opportunity to meet with a variety of interesting and talented individuals from a wide range of organizations. During this process we are also fortunate to receive the continued support of our Forum members, Forum Fellows and Hitachi colleagues. All these groups contributed with numerous suggestions for suitable speakers and moderators, be it at the working group meeting or during subsequent meetings and discussions. All these groups have also played an important role in helping us to update and improve the structure and contents of the Forum over the years.

For the upcoming Forum a special mention should go to Dr. Pierre Beuzit, former vice president in charge of energies strategy of Renault, who gave us some of his precious time in order to propose to us how Forum participants could become even more actively involved in parallel sessions and how to stimulate interesting discussions and debate. Dr. Beuzit is one of the primary architects behind this year's new Forum format and for this contribution we thank him warmly. Once more, he has also accepted to share with Forum participants his vision on the role of transportation in a sustainable society by making a presentation during the forum. You will find an article by Dr. Beuzit regarding this topic in this issue. >>>

Editorial *continued*

Dr. Jean Freymond of CASIN, who has once again kindly accepted to be general moderator of the Forum, has also proven a great support by introducing us to several of his contacts and acquaintances within the World Business Council for Sustainable Development.

In this edition, you will also read contributions from Dr. Masahiro Abe of Hitachi, Ltd. in Japan and from Mr. Stéphane Dupuis of our Brussels office. Both have participated to several Forums in the past and share with us their views on how they expect the Forum to develop in coming years..

This year we will be celebrating the 10th anniversary of the Forum and I feel very strongly that this year's theme on "Energy, Environment and Sustainable Society: Impact on European citizens" will be a worthy topic for this momentous occasion.

Ko Takahashi

General Manager
Hitachi Corporate Office, Europe

Get ready for the 10th EU Hitachi Science & Technology Forum

Documents and websites of interest to the forum theme "Energy, Environment and Sustainable Society: Impact on European citizens"

Numerous documents from the European commission on:

- An Energy Policy for Europe
- Action Plan for Energy Efficiency
- Renewable Energy Road Map
- Progress on renewable electricity
- Progress on Biofuels
- Internal Market for Gas and Electricity
- Gas and Electricity Infrastructures
- Nuclear Energy
- Sustainable Power Generation from Fossil Fuels
- Strategic Energy Technology Plan

Forum impressions and ideas

My first participation to the EU Hitachi Science & Technology Forum goes back to 1999. It was the second Forum held in Dusseldorf. I attended it as a R&D manager of Hitachi Europe, Ltd. While I returned to Japan in 2003, my involvement in the Forum has continued and as a member of the staff of Dr. Nakamura, the Forum Chairman, I have been heavily involved in the planning of the Forum for Hitachi, Ltd. R&D Group. I have been a regular participant of the Forum since 1999 having only missed the fifth edition in Budapest. In the below text I would like to share with you my impressions of and expectations for the Forum.

People may ask why Hitachi is committing so much energy towards the Forum. The answer can be found in the founding principle of Hitachi, which states that Hitachi will contribute to society through technology, and promote harmony with the natural environment and actively engage in social welfare activities, so that as a good corporate citizen it can strive to contribute to a prosperous society. The Forum is a marvelous approach to this goal by providing a platform for discussing societal issues related to science and technology in the daily life of European citizens. The Forum is unique in the sense that it is supported by many volunteers including European Hitachi alumni who understand the culture of Japan and Hitachi as well as European social issues.

The format of the Forum has been improved year by year, and the Forum is attracting more and more important

people in Europe. In order to make the Forum more attractive, let me propose some ideas.

(1) Introducing new blood: The number of European Hitachi alumni (HIVIPS) is not increasing as before. We need to think about how to enrich and maintain the supporting body of this forum in the long term.

(2) Collaboration between events: In addition to the Forum, Hitachi is holding various events in Europe. For example, we have Hitachi-Eurecom Symposium at Sophia-Antipolis near Nice every year to discuss IT technologies, especially mobile communications. We have Hitachi-Cambridge Seminar on nanotechnologies and device physics in Cambridge biyearly. We started a new forum for automotive technologies in Germany recently. All these events have something in common with the Science & Technology Forum, such as common interest or technologies. Collaboration between events may produce new stimulus for both parties.

(3) Forum topics: It will be useful to deepen the discussion if we choose the same topic again a few years later. We could follow up the previous recommendation to the policy makers and reconsider the discussion point to come up with more fruitful results.

These are only ideas at the moment. We need more considerations how to improve the Forum.

Masahiro Abe, Dept. Manager, Global R&D Operation Office, R&D Group, Hitachi, Ltd.

http://ec.europa.eu/energy/energy_policy/index_en.htm

The Intergovernmental Panel on Climate Change Website (IPCC): <http://www.ipcc.ch>

The report from the Working Group on "Achieving a fourfold reduction in greenhouse gas emissions in France by 2050":

<http://www.industrie.gouv.fr/energie/prospect/pdf/facteur4-rapport-final-engl.pdf>

More links will be sent to registered participants and published on the forum website www.hitachiforum.eu in the near future

EU Hitachi Science & Technology Forum, a promising teenager

A first for Europe

Hitachi Europe Ltd., has launched a new technology that will create Europe's first hybrid high-speed train.

The technology could revolutionise the UK and European rail industries and has been proven under test in Japan to cut fuel bills by up to 20% and harmful emissions by up to 50%. The test train includes a new hybrid traction system consisting of a battery-assisted diesel electric traction drive) which will be installed into an existing High Speed Train (HST), with the equipment fitted into the front Power Car and a modified Trailer Car. The technology has been developed and tested in Japan since 2003 and is currently in production for a Japanese customer.

Hitachi and its partners Porterbrook Leasing, Network Rail and Brush Traction are aiming to commence trial running of the modified train in the UK in April this year. On completion of testing the modified train will run in service on the New Measurement Train for a period of six months to prove the benefits of the technology. The aim of the trial is to demonstrate to the European rail industry the potential benefits of hybrid trains in terms of lowering fuel bills, maintenance costs and emissions, as well as dispelling any fears about the safety of the new technology.

"Long-term sustainability is a key requirement for future transportation systems and Hitachi is delighted to be playing a part in developing this new hybrid traction system, which will in time demonstrate significant benefits in reducing the environmental impact of train travel and reducing fuel bills."

Alistair Dormer
General Manager, Hitachi Rail Group

The New Measurement Train is undergoing modifications to run as Hitachi's hybrid power demonstrator. The Power Car will be modified to fit the demonstrator train.

The 10th EU Hitachi Science & Technology Forum will take place in Paris in May. Over the years, the Forum has evolved quite drastically in terms of content, structure and number of participants. The first meeting, in Juan-les-Pins, France, gathered some 30 participants for a one day meeting with a few lectures by experts. The 10th Forum is expected to be attended by 150 participants from all over Europe and the world, with different backgrounds, for a 2 days meeting with lectures, but mainly with discussions and exchanges among all participants, be they experts or generalists.

Like for a child, at the time of its conception, in the mind of a few Hitachi people, how the Forum would evolve was not entirely clear. Like a baby, over the very first years, it has been nurtured and taken care of by its founders. Gradually, the Forum started to grow and to take its own responsibilities and initiatives. Over the years, the Forum members have been more and more involved, through the Working Group members, in the selection of the theme, in the design of the agenda, and even in the final goal definition of the Forum. This was the time of its infancy.

Now, after 10 years, the forum has probably reached its optimal size, 150 participants being large enough to be representative of the European public opinion, but being small enough to allow the easy interaction between all

participants, hence favoring the discussions and information exchange. It is also now clear what the Forum wants to become, a preeminent player in the European public policy debate. The Forum has become a teenager.

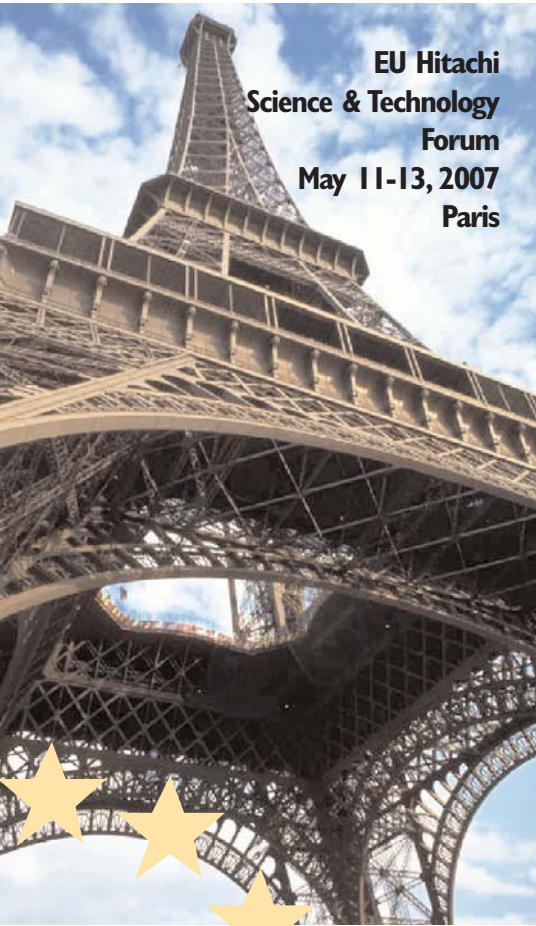
But the Forum's goal is not achieved yet. To move from teenager to adulthood, it will have to accumulate weight or muscle; it will have to be recognized by the outsiders, by the readers of the Forum report. Getting that recognition will only happen if the forum participants can, through their commitment, their preparation and their active participation in the debates, strengthen the conclusions of the Forum and thus enhancing the content of the summary report. The distribution of the report will also have to be expanded, and that will only be possible with the active support of all participants.

For 10 years now, I have been fortunate to be closely involved in the organization of the Forum. It has given me the opportunity to meet hundreds of interesting people, with extremely diverse backgrounds, who have helped us shape the Forum agenda year after year. Most importantly it has given me the chance to make new friends, with you, the Forum members.

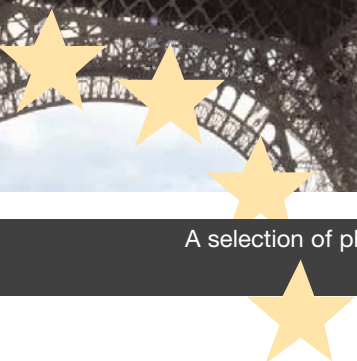
I am really looking forward to meeting you again in Paris.

Stéphane Dupuis, Forum coordinator





**EU Hitachi
Science & Technology
Forum
May 11-13, 2007
Paris**



A selection of photos of past Forum locations - can you remember them?

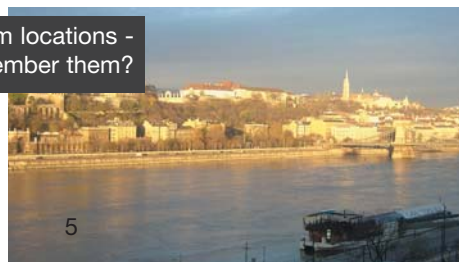
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The Hitachi Corporate Office, Europe welcomes and encourages your comments and ideas.

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Visit the Forum homepage:
www.hitachiforum.eu



**NEW
Forum
Website**



The Forum website is in the process of being re-designed. New functionalities, particularly a dedicated section for Forum members only and password protected, will be added over the time. You will be able to access this site soon on <http://www.hitachiforum.eu>

Please let us have your comments and suggestions on the website or new Connexion layout.

We welcome your contributions and photos to include in future issues.



1 Antibes Juan-les-Pins 2 Krefeld 3 Portmarnock 4 Brussels 5 Budapest 6 Antwerp 7 Stockholm 8 Athens 9 Warsaw