



Commissioner Janez Potočnik

*Coming together, keeping together, working together
for a low carbon future*

SET Plan Conference

*21st – 22nd October 2009
(Stockholm, Sweden)*

It's been a year since the last SET-Plan event in Paris. And it has been quite a year, hasn't it? We've lived through the birth and supposed death throes of a real financial crisis and are now working hard to make Copenhagen a success. Things have moved fast – but the underlying reasons why we are all here remain unchanged – climate change, energy security and building competitiveness.

Two things are clear: we cannot afford to put the brakes on our investments into R&D....and we cannot underestimate the scale of our challenges

Our primary energy supply remains 80% dependent on fossil fuels. And for decades our economic growth and prosperity has been built around them. However, this dependency is also largely responsible for huge CO₂ emissions.

The G8 in Aquila agreed that developed countries would have to cut their greenhouse gas emissions by 80% by 2050. From 80% dependency to 80% cuts in greenhouse gas emissions in forty years – that is almost too big a challenge. Too big UNLESS we reinvent our energy system – using a low carbon model.

There isn't any quick fix for this and no single path. The solutions will depend on a combination of market forces, resource availability, public acceptance and political choices, in whichever country they are implemented.

One thing is constant though: technology lies at the heart of the challenge: new technology. We need to push back the frontiers of our known world. We need new materials, new chemistry and physics, new breakthroughs in nano and bio-technology, new ways to produce and consume energy.

Not only do we need it new, we need it now. We need to break up the arduous chain which keeps these innovations from getting to market. Climate change and energy security are problems of today that need to be addressed today. And obviously this puts our science and technology fabric under pressure.

The SET-Plan is the technology pillar of the EU's energy and climate change policy – the method of choice for speeding up the development and market take-up of low carbon technologies. It sets out a vision of a Europe with world leadership in a diverse portfolio of clean, efficient and low-carbon energy technologies. It is also an engine for prosperity – that means growth and jobs. It's not a mirage – it's a vision of Europe working **together** to maximise the industrial and societal returns of technology through joint strategic planning and more effective implementation.

We are here today to turn that vision into reality.

Last year in Paris, we celebrated the inauguration of the European Energy Research Alliance between Europe's leading national research institutes, whose aim is to conceive and implement joint energy research programmes, by pooling their own talent and resources. Ton Hoff, the Chairman of the Alliance, is on the Panel this morning, so I won't steal his thunder by saying too much now, except that the Alliance is just the sort of venture we need in Europe. It can help bridge the gap between simple projects and large programmes; and improve collaboration between full research institutions. It's a model that could and should be adopted elsewhere.

I would like, instead, to talk about another key part of the SET-Plan – the European Industrial Initiatives, or EIIs. They are, quite simply, a means for European industry to lead the world in the development of clean and efficient energy technologies.

EIIs are focussing effort on the key challenges and bottlenecks and proposing concrete actions for the period 2010-2020. Working closely with industry and other stakeholders, we have drawn up Technology Roadmaps for the implementation of the industrial initiatives. These will be discussed in detail during the parallel sessions this afternoon. I hope that they will receive widespread support and that we can use them as the basis for launching the initiatives in the coming months.

To make sure these EIIs take off, our best bet must be a public-private-partnership style collaboration, such as we have used in recent initiatives like the JTIs or in the 3 PPPs in the European Economic Recovery Plan.

No one size will fit all here, but we will have to find the best fit for each initiative.

It is crucial that the public side, the Commission and the member states, reinforce our efforts to work together. Today, decisions on research programmes are taken independently in a large number of places across Europe – at national and regional level, by funding agencies and research councils, by individual institutions themselves. We must bring some coherence to this effort to avoid wasteful duplication and to ensure that public financing is used in an optimal way.

In case you were wondering, I'm not trying to centralise research funding in Europe, nor am I trying to build another Framework Programme. We already have a great one. I am talking about Joint Programming – working together to ensure that European and national research agendas complement and reinforce one another; that we don't all work on the same thing at the same time; that we launch complementary actions within one strategic framework agreed by us all; that we align our considerable forces to achieve common goals.

Henry Ford had something to say about this...he said "Coming together is a beginning. Keeping together is progress. Working together is success."

And like Henry Ford, the SET-Plan is a pioneer...but for joint programming. If it is successful, it really could change the European research landscape. This new view will give European programmes the chance to play a different role – moving away from a project by project approach towards the idea of 'co-investment' in programmes. I believe that this is the right direction for the future.

How then will we pay for the SET-Plan?

Well, we have a good estimate of how much it will cost. Now we have to find the means to get on with the job.

In doing this, we have to remember that we are dealing with the public and private spheres. There are public policy issues we must address to head off the social and inevitable economic consequences of doing nothing. But we also must bear in mind that industry will deliver the

technologies to the market. They will understandably want profits from the massive take-up of low carbon technologies.

And because developing low carbon technologies – at all stages of the development cycle - is a risky business, we need to share the risk with all relevant actors, public and private according to their varying roles. Put simply, the higher the technology risk the more public support is needed, particularly in the form of grants. Where there is predominately market risk this more limited public support should move towards high leverage instruments such as loans and guarantees.

These public policy goals need a faster pace than has traditionally come about through traditional industry investment decisions and cycles. This means that industry has to take greater technological and market risks, to accelerate the development of new technologies and roll them out in record time. We want banks and private investors to become less risk-averse, to pump billions of Euros into the companies that will drive the transition to a low carbon economy.

A tough call, you would think in the middle, or perhaps in the dying embers of a financial crisis – I agree, but that is precisely why public authorities must be prepared to offer the appropriate incentives and consistent policy signals, and – above all – to significantly increase public funding of research, development and commercialisation of low carbon technologies.

Our view is that the current level of research investment, which has stagnated for decades, has to more than double – public and private – from 3 billion euros annually to 8 billion euros annually. That adds up to an extra 50 billion euros over the next 10 years. This will be a real challenge in the current economic climate, but one that will pay rich dividends in the future.

Our reasoning is simple – a sustainable future needs faster development in energy technology. Only if we invest heavily in research today will we get the technologies needed to cut the emission of greenhouse gases and secure our energy supply tomorrow. Cleaner and more efficient energy technologies will reduce public spending in the long run, as low carbon technologies become cost-competitive and require lower subsidies to

enter the market. They will also give Europe a competitive edge in the expanding market of green technologies.

Where will this money come from?

From sources such as the ETS Directive. This will allow, from 2013 onwards, auctioning revenues to be reinvested at national level in the development of more efficient and lower cost clean technologies. The use of the revenues is determined by the Member States, but at least 50% should be used for climate change related activities.

Or from the 300 million euros of EU Allowances set aside from the New Entrants Reserve of the Emissions Trading Scheme (ETS). This will be used to support carbon capture and storage and innovative renewables. These allowances will be made available by Member States for demonstration projects selected on the basis of criteria defined at Community level.

On the public side, we will have to see if we can leverage more from the EU budget. The up-coming mid-term review of the current financial perspectives and reflections on the next financial perspectives will be the time to do that – to have a full and frank debate with Council and Parliament. This debate will, for obvious reasons, take into account the degree to which Member States are willing to engage in pooling their resources through the Joint Programming approach I mentioned earlier.

Ladies and Gentlemen

I do not think I have to say much more. You know what I want. I want combined public resources, both EU and national, and effective and flexible Public-Private Partnerships with industry. These are the future models for pan-European research cooperation.

At the same time, if we want these large-scale demonstration projects for SET-Plan technologies to work, we need to combine resources from different actors and instruments. We will need grants, loans and loan guarantees for large projects, be they demonstration projects, first of a kind plants or market replication. I'm sure that Philippe Maystadt – on the panel this morning – will have plenty of ideas about this. Perhaps the European Investment Bank could play a pivotal role in helping us put together a new more coherent style of financial package together.

I will finish with a call for action. We are in a unique position – because we get to decide whether it is worth building a low carbon economy.

Actually, I think we have already decided. We know that now is the time to deliver; we just have to work out how...so let's get on with it

