Indeed, there is more to innovation than mere research. Innovation requires exploiting new and existing knowledge into solutions for the entire society. In addition to research and technology, innovation requires the right mindset by all actors involved in the process and spanning the private and public sectors.

The new EU approach to complement research policies with innovation partnerships is a big step in the right direction.

Risk aversion hampers competitiveness

By and large, however, European attitudes remain risk averse, which leads to over-reliance on regulatory instruments to control risk. This creates market distortions, where government-favoured but non-economically viable products or technologies are crowding out more efficient and competitive solutions.

Nanotechnology is an example of a highly promising field of development where an overly prescriptive regulatory approach could undermine innovation and European competitiveness. Cefic is actively seeking to redress the imbalance through a number of promising initiatives. We are addressing the issue of public distrust through the EuropeanTechnology Platform for Sustainable Chemistry (SusChem), which focuses its efforts on new technologies and perceived risks. Cefic's Long-range Research Initiative, meanwhile, has been extended to cover the acceptance of new technologies and products. A third of LRI's budget has been earmarked for research on societal perception.

The regulation of risk in the EU is heavily influenced by public perception, and the same holds true for climate change policies. Cefic is concerned by mounting calls for the EU to move toward a unilateral target of 30% reduction in greenhouse gas emissions by 2020 from the 1990 level.

Cefic calls for an international climate change agreement that involves all major emitters, avoids competitive distortions and does not impede growth. We are working with other stakeholders to help develop a shared, long-term and global vision and to ensure that measures taken are fully and equally taken into account.

Emissions reductions require global agreement

During the past decades Europe's chemicals manufacturers have substantially increased their energy efficiency. They are now among the world's most efficient and any unilateral measures or targets will undoubtedly put their competitive position at risk. The European Emission Trading Scheme is a case in point. Launched in 2005, ETS is designed to curb carbon emissions in the EU through a cap-and-trade system. Under the second phase of ETS, which started in 2008, the EU has committed to cut CO_2 emissions by 20% by 2020. The European Commission's plans for Phase Three of ETS, due to start in 2013, include proposals for increasing the reduction target to 30% by 2020, as well as the inclusion of other greenhouse gases in addition to CO_2 and widening the scheme's scope to cover a number of new industrial sectors.

ETS presents a major challenge to chemical industry's competitiveness, because energy can account for as much as 80% of production costs in some chemical processes.

ETS has a direct and indirect impact on costs. Installations covered by ETS face the additional costs of purchasing allowances for energy-intensive process-related emissions. Meanwhile, as electricity consumers they face price hikes because power producers are passing on their own allowance costs to their customers.

European power prices have surged since the introduction of ETS. Combined with a poorly functioning EU market for energy and a lack of competition, this has had a significant impact on sectors exposed to worldwide competition. Although there are some corrective mechanisms, the truth is that many manufacturers in Europe are at a serious competitive disadvantage because of ETS.

Any global agreement on climate change must therefore commit all developed countries and other major emerging economies to internationally legally binding and equally strong emission reduction targets.

ETS threatens competitiveness

Cefic argues that the EU should seek to strengthen its competitive and innovative capacity by allocating resources toward energy efficiency rather than discourage investment by trading emissions rights on financial markets. Although Cefic remains actively involved with the European Commission in developing the implementation details of ETS, it believes that generating EU-specific costs will lead to restructuring and the relocation of employment and manufacturing outside the EU.