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Hydrogen for the future Europe

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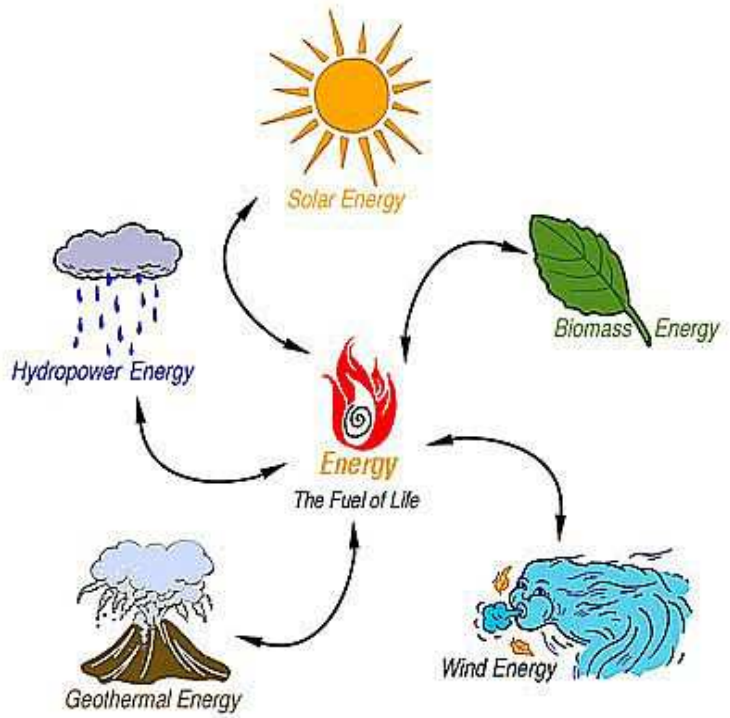
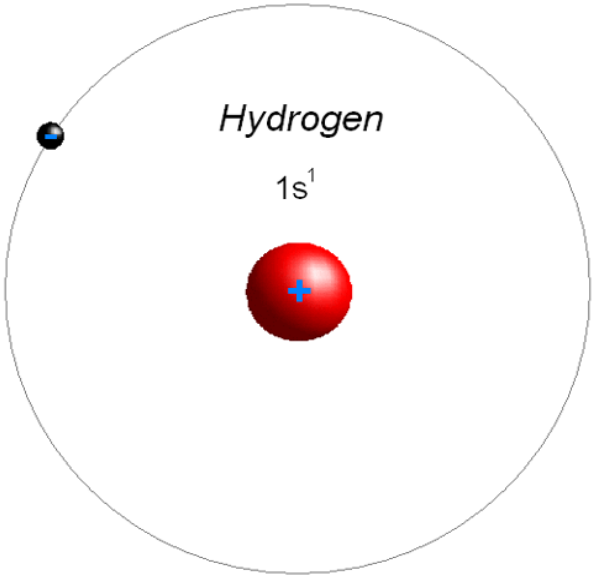
Hydrogen is an energy carrier with great potential for clean, efficient power in stationary, portable and transport applications. It can also improve energy efficiency in transport and contribute strongly to mitigating climate change – especially when produced by renewable primary energy sources.





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Potential role of hydrogen as energy carrier to contribute to low carbon EU energy and transport system is recognized by EU policy-makers and described in A Roadmap for moving to a competitive low carbon economy in 2050, Energy roadmap 2050, SET-Plan, Transport White paper, Proposal for directive Alternative Fuels infrastructure.

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Hydrogen energy technologies can substantially contribute to EU energy and climate package 20-20-20 by 2020.

In the frame of economic recovery, there is also the target of 20% contribution by industrial sector to EU-GDP (New Industrial Policy).

Hydrogen and FC technologies can also contribute to that 20% target.

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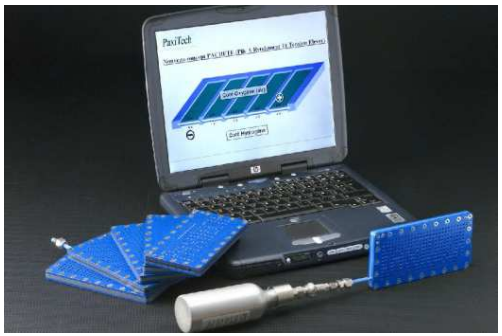
FCH technologies have not yet reached full deployment in the market, so that possible contributions to these 4*20 are not fully exploited.

To enable more thorough exploitation of HFC potential further R&I is needed.

***Good news*: European Commission has approved second phase of Fuel Cells and Hydrogen Joint Undertaking!**



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FCH technologies is a global issue, which hence requires global action.

Global action covers cooperation in international standards and regulations but also international cooperation in R&D (e.g. in the frame of IPHE, IEA-HIA).

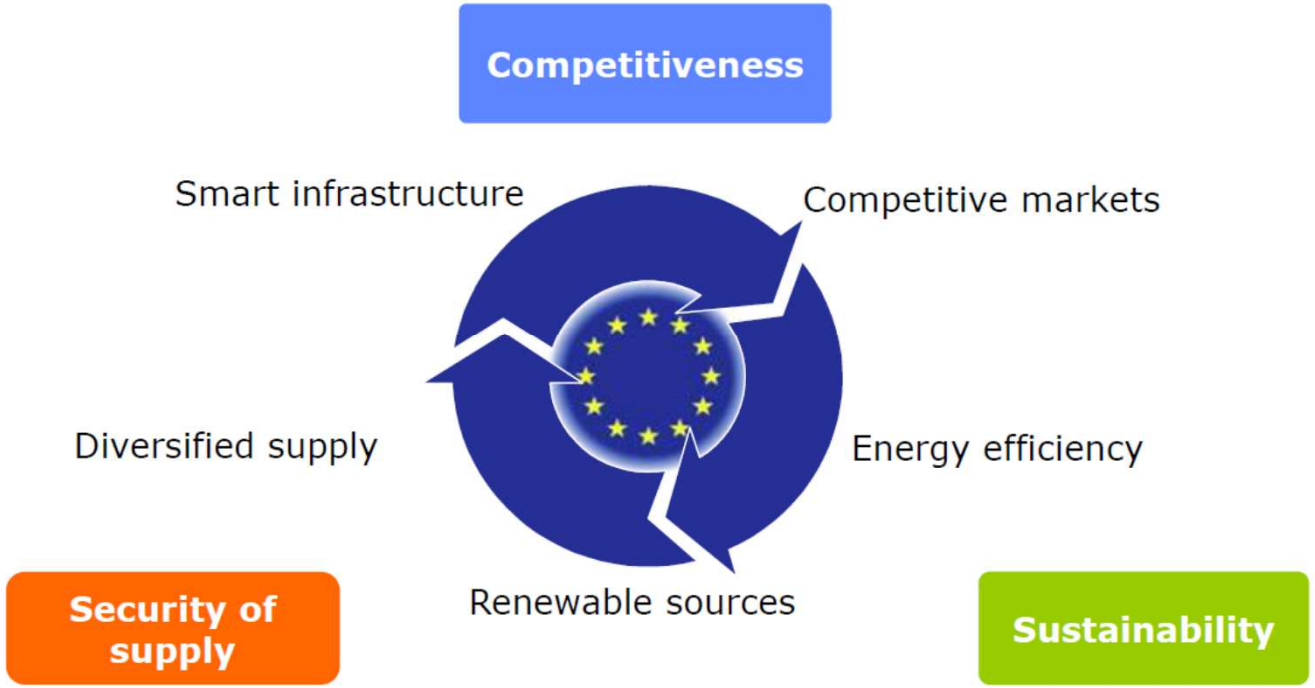
R&D cooperation example: the case of Lithuania

Implemented projects on FCH technologies:

- ***USA DoE (USA) 2 projects 2002-2005;***
- ***EU 6th Framework Programme (6FP) - 4 projects;***
- ***EU Structural Funds – 6 projects;***
- ***Nordic Energy Research (NERP) –2 projects 2002-2010;***
- ***Task 17,22,32 of IEA HIA 2002-up to now;***
- ***The N.ERGHY association 2011- up to now.***

Conclusions

Hydrogen energy technologies can effectively and substantially contribute to priorities identified in last presentation by European Commission President J.M. Barroso to the European Council.



Presentation of J.M. Barroso to the European Council, 22 May 2013

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Thank you for attention!