

Renewable Energy Financial Perspectives in Southern Europe

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Introduction



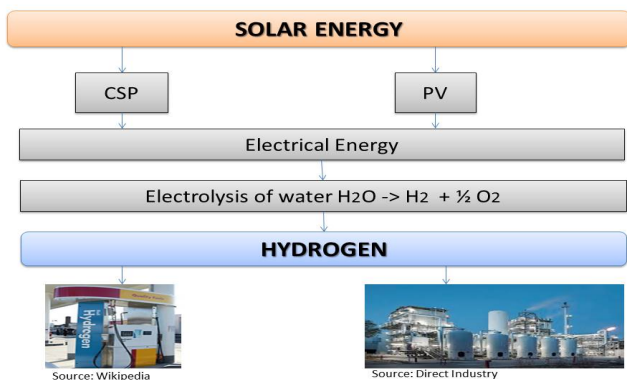
Solar Tower in Jülich
Source: German Aerospace Center (DLR)

- Possible growth and investment opportunities in the field of solar energy in Southern Europe
- Effectiveness and suitability of schemes and policies which support them
- Production of hydrogen by means of the electrolysis of water
- Hydrogen Storage

The Falling Cost of Concentrating Solar Power



Source: U.S Department of Energy 2012. SunShot Vision Study.



Electrolysis and Hydrogen Storage

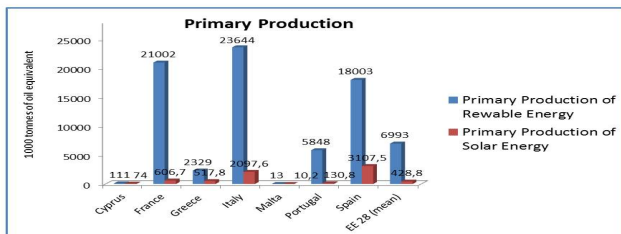
Overview of electrolyser technologies

- Alkaline electrolysis using a liquid basic electrolyte (commercial)
- Acidic PEM electrolysis using a proton- conducting polymeric solid electrolyte (commercial medium)

Hydrogen Storage

- High pressure gas storage (commercial)
- Liquefied gas storage (commercial)
- Solid- state storage (commercial limited)

Primary production of renewable and solar energy, 2014



Source of Data: Eurostat

Support Policies in Southern Europe

- Feed-in-Tariff (FIT)
- Premium Payment
- Tendering
- Net Metering
- Grants
- Loans
- Public Investments
- Reduction in Taxes

Conclusions

Hydrogen will play an important role in the future and it also seems that there are great prospects in the transport sector.

The right support schemes applied in southern European countries at the right conditions had an important impact and boosted significantly their CSP and PV markets.

The development of the Spanish and Italian markets is typical examples of that. However, recent policy changes in Spain and in Italy resulted to a slowing in these markets.

References

1. U.S Department of Energy 2012. *SunShot Vision Study*.
2. EnergieAgentur NRW 2013. *Hydrogen- the Key to the Overall Energy Turnaround*.
3. Eurostat. Available at: <http://ec.europa.eu/eurostat/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=ten00081&language=en>

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