# Feed-in Tariffs and Contracts-for-Difference:

Financing Projects with Long-Term Price Guarantees

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### Europe's investment needs

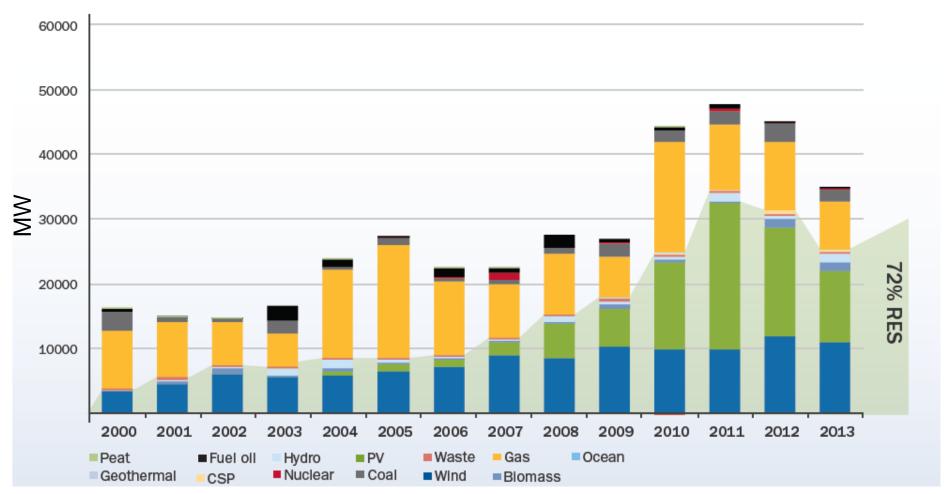
\$1,600,000,000,000

According to one of the IEA's scenarios, \$1.6 trillion in generation investment could be needed to 2035 (some \$75 billion, or €60 billion per year)

Source: IEA, 2014



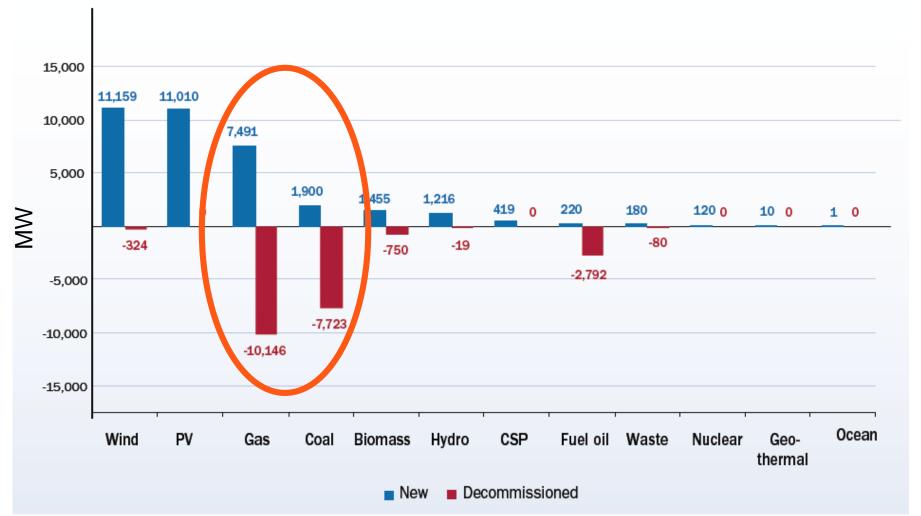
## Plenty of investment has taken place in Europe since 2000



Investment in Europe by type, MW. Source: EWEA, 2014



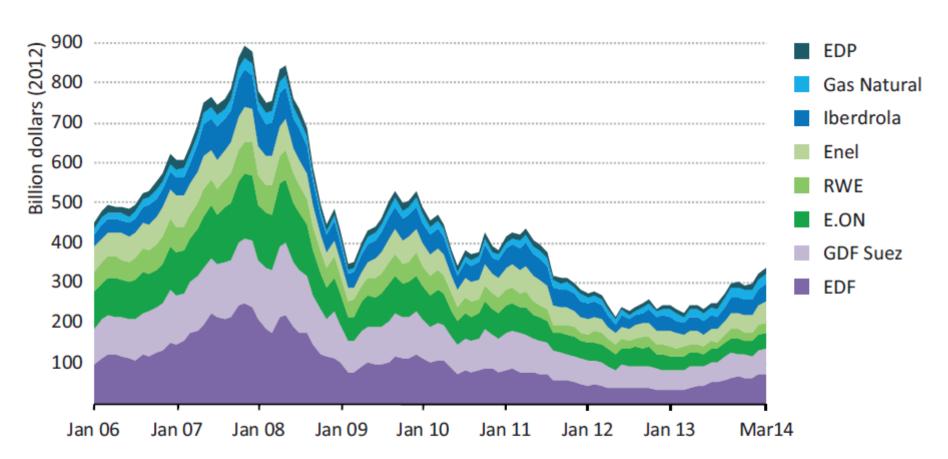
# But investment in dispatchable plant is today net negative



New investment and decommissioning in 2013, MW. Source: EWEA, 2014



#### ... and utilities have suffered a lot



Note: GDF and Suez were distinct companies until June 2008.

Sources: IEA analysis and 2° Investing Initiative, based on Bloomberg Professional service.



### We already have one European market...

- Short term: Intraday, day ahead and market coupling
- Medium term: a few years forward
- Transmission across interconnectors
- The wholesale market works well
  - Price signals for efficient dispatch
  - Hedging and management of earnings at risk
  - Price harmonisation between regions
  - Communicating system stress negative prices, price spikes, price decreases because of over capacity, price volatility, etc
  - Communicating earnings potential to equity investors
  - Highlighting policy stresses



## ...but there are nevertheless limits to the market's usefulness for investors

- Individual member state policies focussed on significant interventions and subsidies
  - Policy/political uncertainty
  - Crowding out
  - Prices versus LCOE's
  - Increased cost of capital
  - Makes forecasting long term prices very difficult
- To tackle CO2 emissions we need to focus on... CO2!
  - Not the different means to decarbonise
  - Work at a global level with partners nearly 90% of emissions do not come from Europe!
- Also need to revisit market design. All needed investment will probably not take place based on an energy only market alone
  - 'Missing money' problem
  - Lack of long term contracting
- Energy Policy and Market Design need to pull in the same direction



#### **Contract for Differences - CFDs**

- Longer investment horizon means
  - More pronounced policy risks for investors
  - Larger impact on investment decisions
- The CFD provides
  - Long term revenue certainty for investors
  - Protection from high and volatile commodity prices for consumers
- CFD's achieve more than FIT's if well designed
  - Power sold as normal in the market and liquidity can be improved
  - Volumes are controlled no crowding out of other technologies
  - Compatible with EU member state responsibilities to
    - Choose its energy mix
    - Ensuring security of supply (energy and capacity)
  - Can become technology neutral in the future

