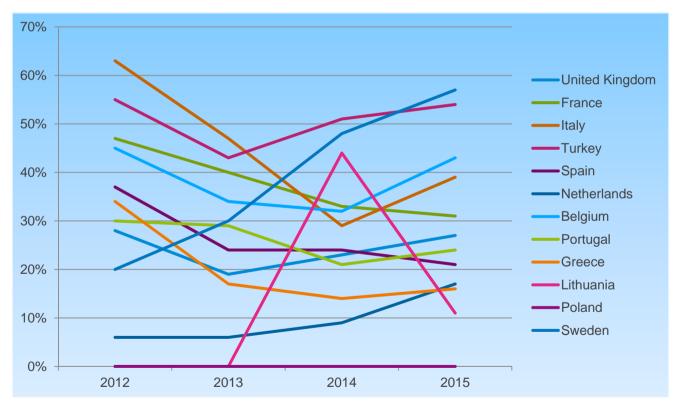


A low rate of use in LNG terminals in Europe



A low rate of use in LNG terminals in Europe

■ Below 30% in average during the last 4 years in Europe



Source: Kpler / IHS CERA

A low rate of use in LNG terminals in Europe

- Multiple reasons in a global market
 - Attraction of other more attractive market places (see Fukushima crisis)
 - Terminals size based on specific expected country needs at the time of the FIDs (see 2008 economic crisis)
 - Competition with other flex assets increased (development of storages and xborder capacities)

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A low rate of use in LNG terminals in Europe

- Market players' decision in a worldwide concern
 - Unloading decisions in LNG terminals are totally linked to the whole LNG chain.....
 - ✓ LNG contractual source
 - Cargoes availability and shipping constraints
 - ✓ Subscriptions of slots
 - ✓ Needs for LNG to balance downstream portfolios or sufficient liquid hubs on downstream markets
 -With regasification costs (including entry costs into the gas grid) as a key parameter to be valued by shippers in their portfolio optimization strategy



- 2 layers to explore from upstream to downstream markets
 - ✓ The "Off-shore" LNG market
 - ✓ The LNG terminal rules

- The "Off-shore" LNG market
 - A market which is not really in place today (no price signal, no liquidity, no depth) but with some clear specifications (supply and shipping logics)
 - A European LNG VTPs model could be drafted:
 - 2 trading zones: Atlantic and Mediterranean basins linked to classical LNG routes
 - With DES and FOB cargo offers indexed by LNG terminal
 - On harmonized trading platforms and governed under standardized terms
 - But with many questions to tackle as for any new market set-up: number of participants, continuous availability of bids and offers,.....
 - This is not European regulators' responsibility to create such markets, but market players could make them a reality.....however with the essential help of CEER/NRAs who have to take the right actions on transmission and terminal TPAs (tariffs / rules / simplification)

- The LNG terminal rules
 - Capacity secondary markets should be facilitated (berthings, storage, and regas rights)
 - Terminal offers should be simplified and balanced
 - Ensure the whole use of the assets flexibility (storage, low regas) by the users
 - Attract more customers on the primary offer but also through structured deals
 - Develop innovative services to maximize LNG capacity value
 - Reload/Transhipment services
 - Parallel market opportunity (trucks, bunkering)
 - Pooling capabilities (as proposed in French terminals)

- The LNG terminal rules
 - Develop innovative services to maximize LNG capacity value
 - Day-ahead regas flex to match with balancing needs of end users portfolio
 - Ease nomination and allocation of grid entry capacities to avoid "bottle necks" between system operators' offers
 - TSO rules to be adapted accordingly:
 - LNG grid entry tariffs should be reduced to foster LNG unloads
 - LT x-borders bookings will end soon, push unit x-borders tariffs very high and kill in consequence current hubs liquidity and attractiveness

