Fifth IEF-IGU Ministerial Gas Forum

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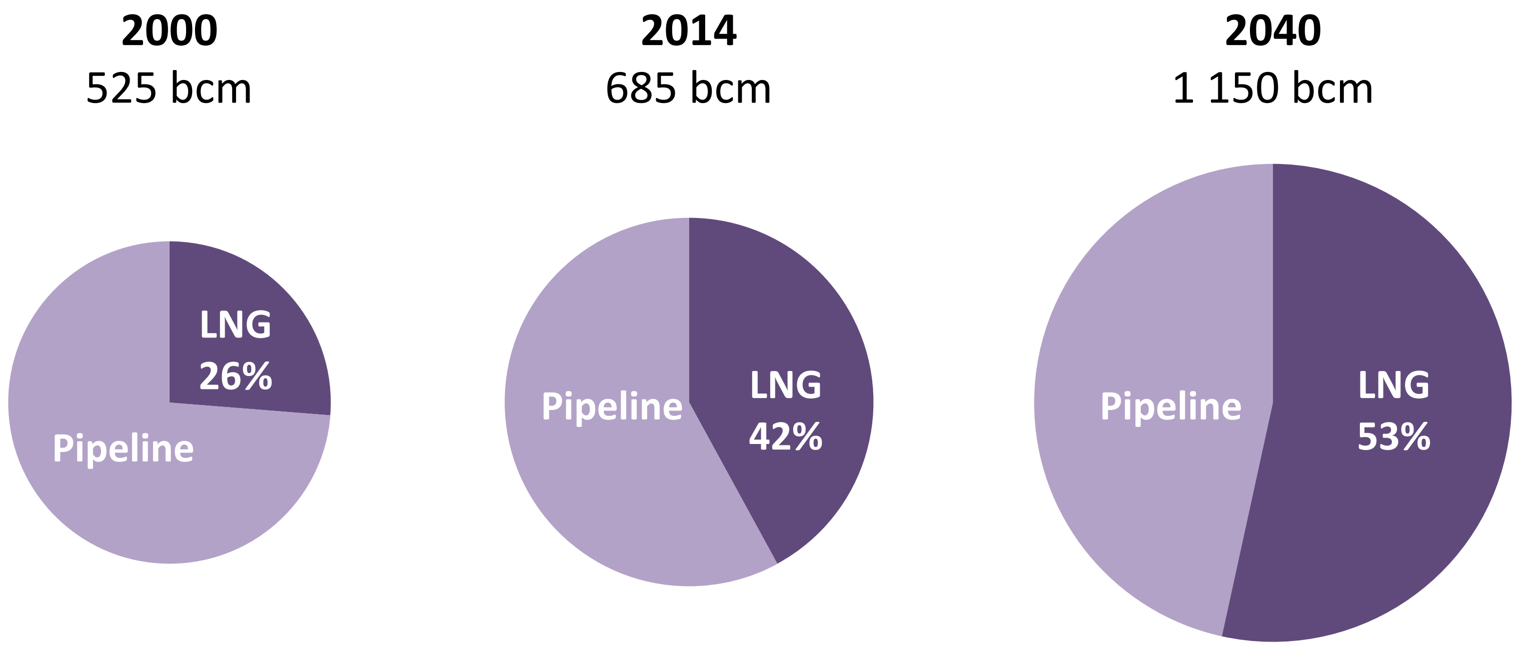
A wave of LNG spurs a second natural gas revolution

Share of LNG in global long-distance gas trade

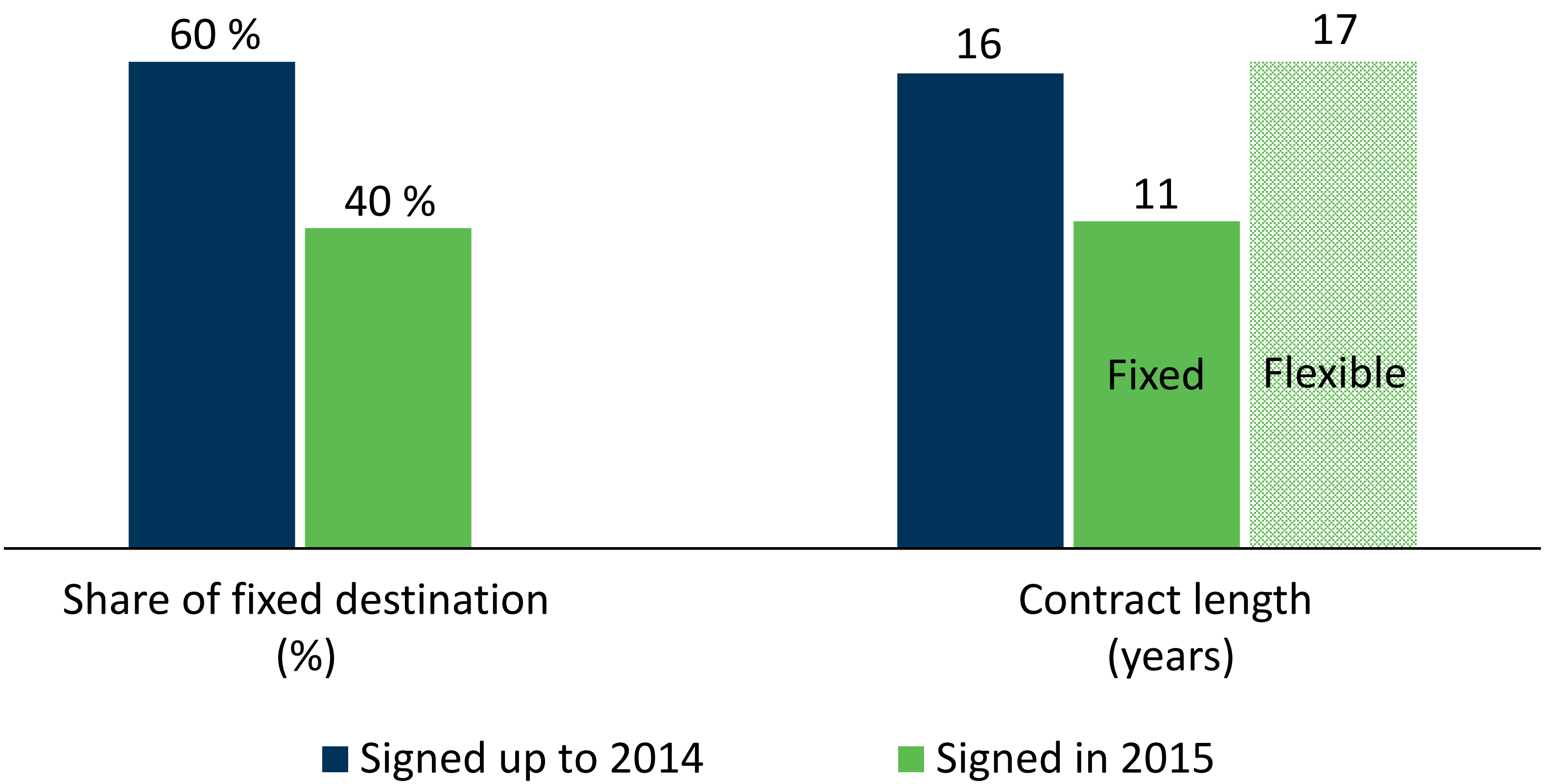


Contractual terms and pricing arrangements are all being tested as new LNG from Australia, the US & others collides into an already well-supplied market

IEA's Global Gas Security Review

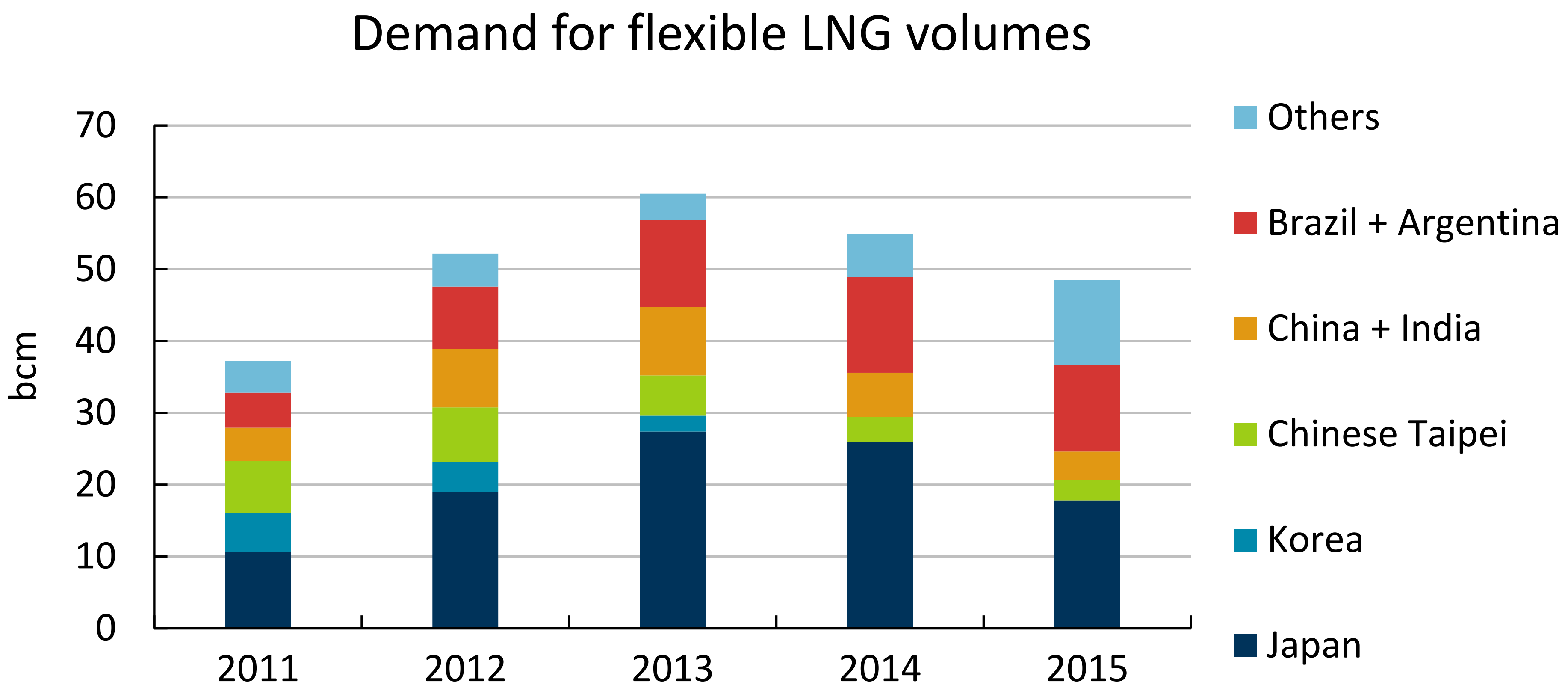
- Gas is playing an increasingly important role in the energy mix
- Well supplied markets does not mean gas security can be taken for granted
  - *As markets become more interconnected, shocks in one region can quickly spread*
  - *Disruptions are arising from poor regulation, geopolitical crises & natural disasters*
- In response, the IEA is broadening its role on energy security to include gas
  - *This follows mandates from 2015 IEA Ministerial & G7 under Japanese Presidency*
- IEA will conduct "resiliency assessments" & bring data/analysis to market participants to boost transparency, including:
  - *outages by type & region*
  - *flexible & uncontracted LNG volumes*

But LNG contract structures are becoming less rigid – increasing market efficiency



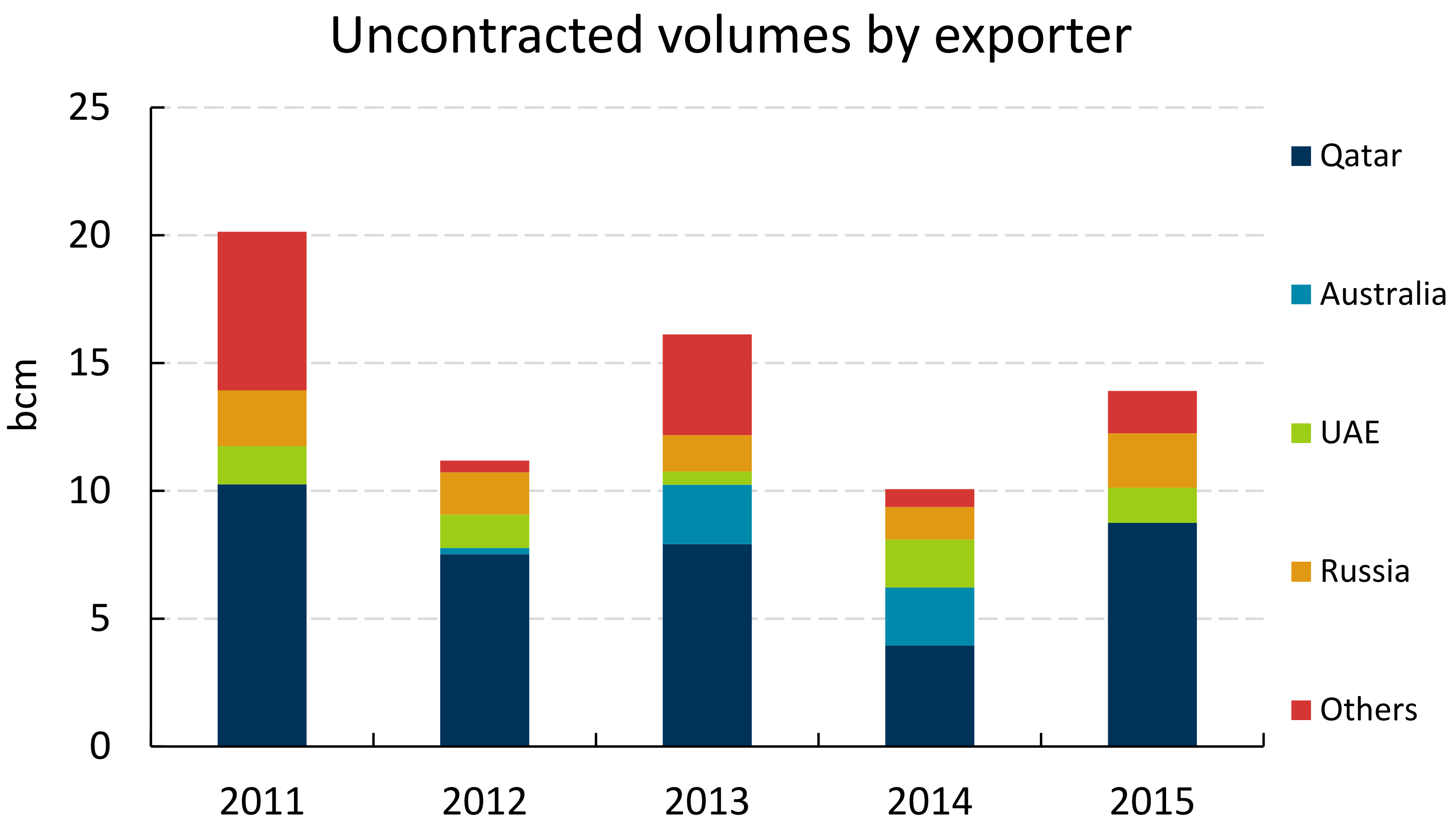
Contracts with flexible destinations & shorter terms are becoming more common; buyers will accept longer contracts in exchange for increased destination flexibility

Demand for flexible LNG volumes remains above pre-Fukushima levels



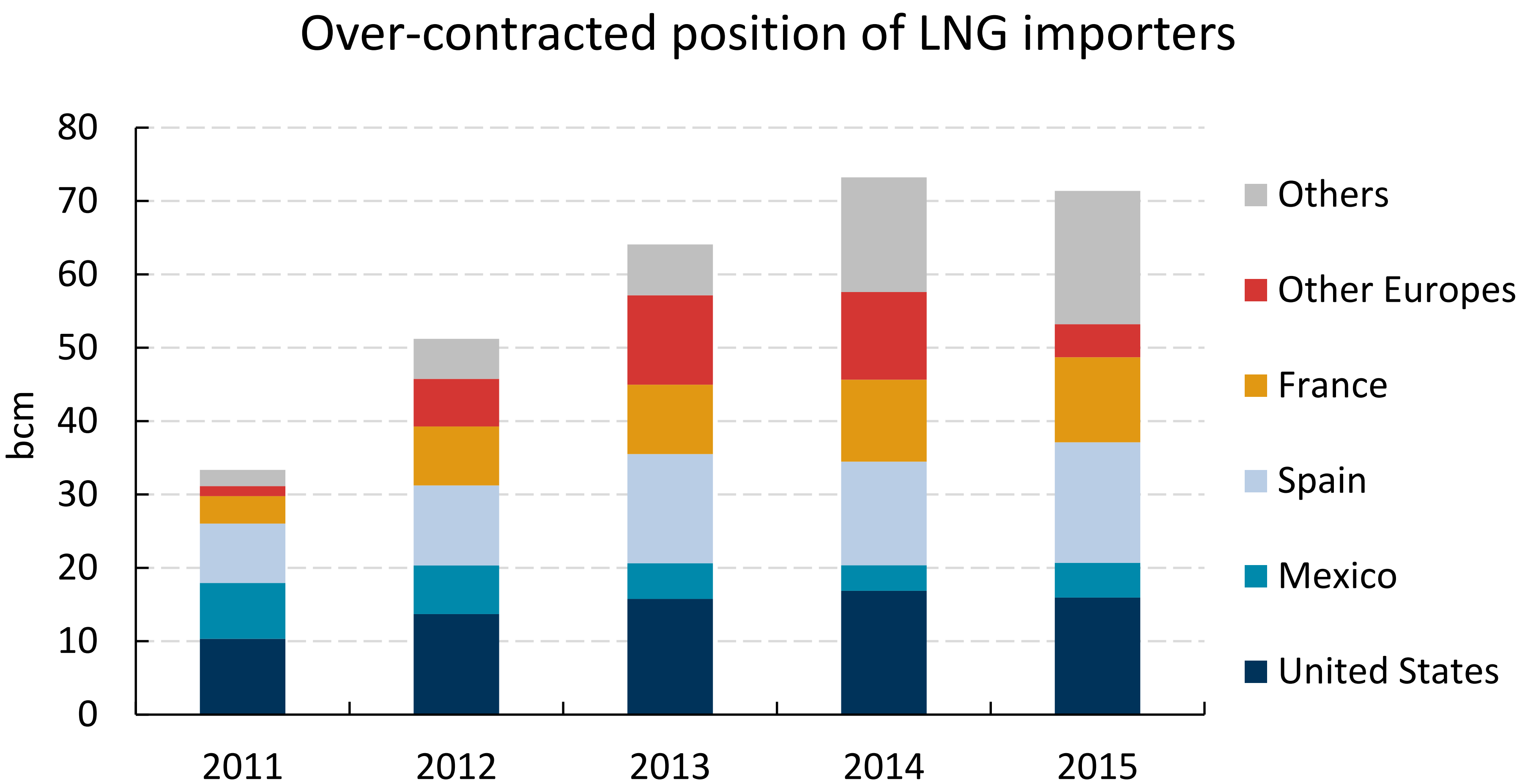
Demand for flexible LNG volumes peaked in 2013 at around 20% of global LNG trade; new buyers are offsetting some of the slack left by Japan

Qatar plays a pivotal role in LNG security



Qatar provides more than half of global uncontracted LNG volumes; Flexibility comes from uncontracted LNG, diversions, re-loads & contracts with open destinations

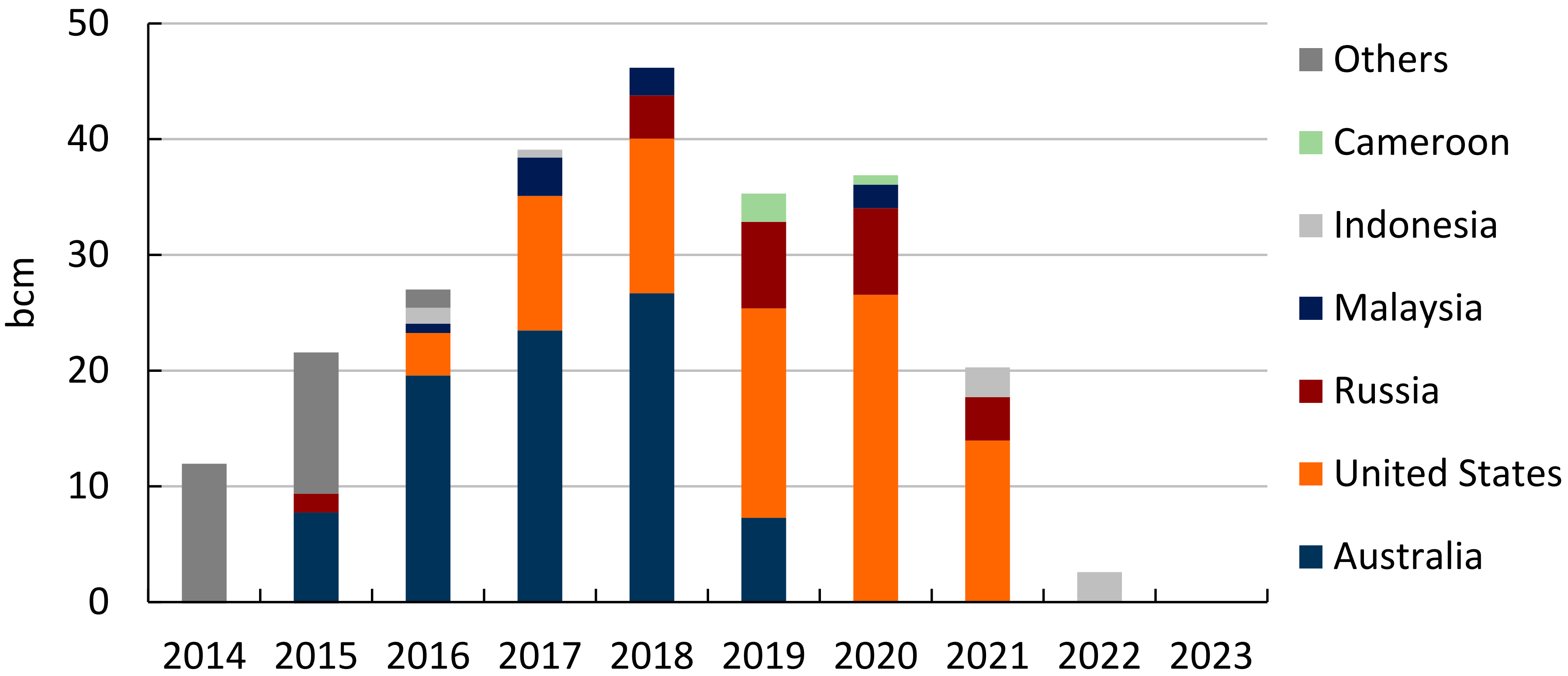
Europe key provider of volume flexibility to the market



Europe and the United States have accounted for much of the flexibility provided by the demand-side over the past 5 years.

Lack of investments risk tightening the market next decade

Incremental liquefaction capacity under construction



By the early 2020's the current wave of new production additions will run out. New investments needed to avoid future market tightness.