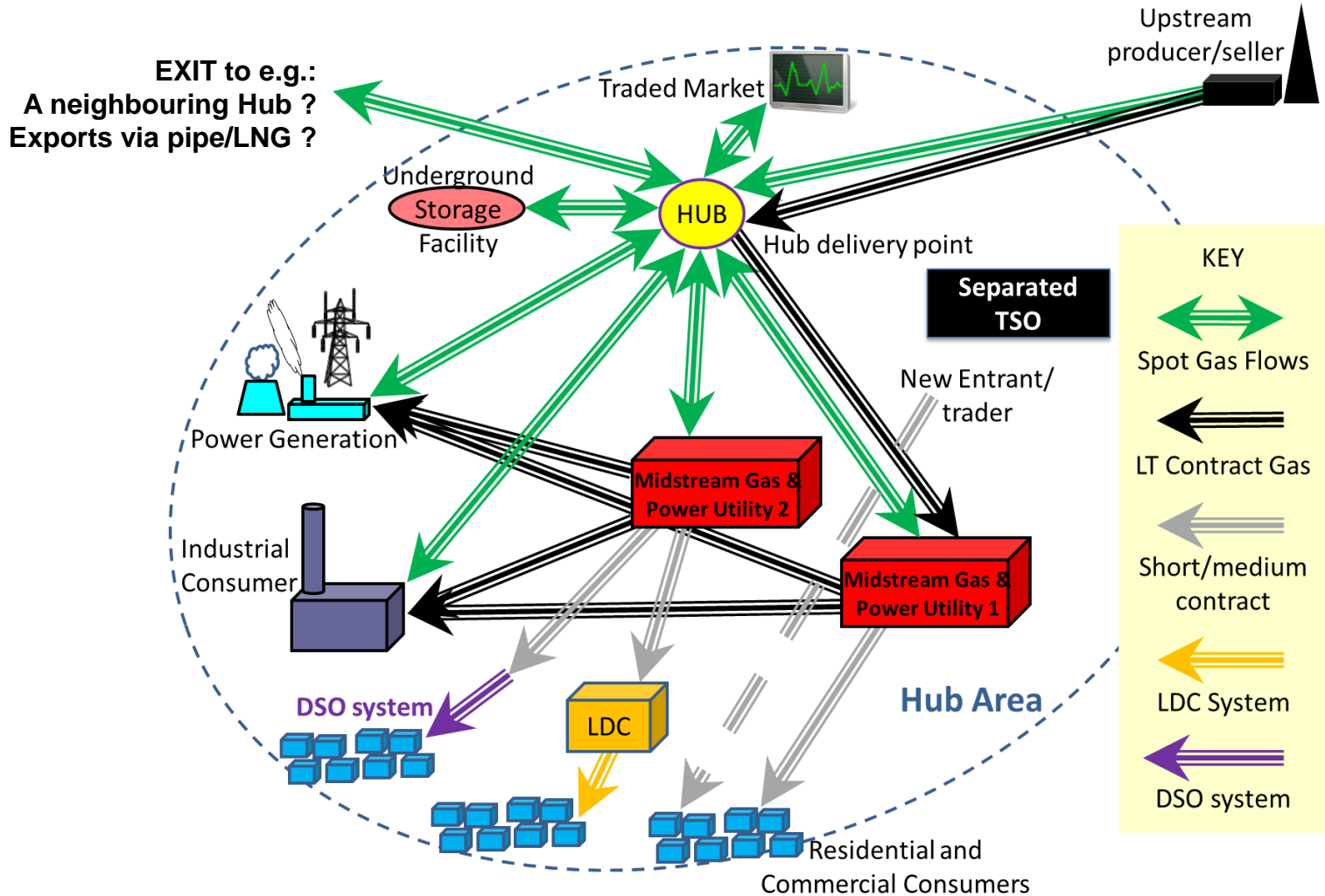


Implementing the natural gas market reform in Brazil: Insights from European experience

IEA Webinar
29th September 2020



Hub-Based Gas Market



Source: Heather

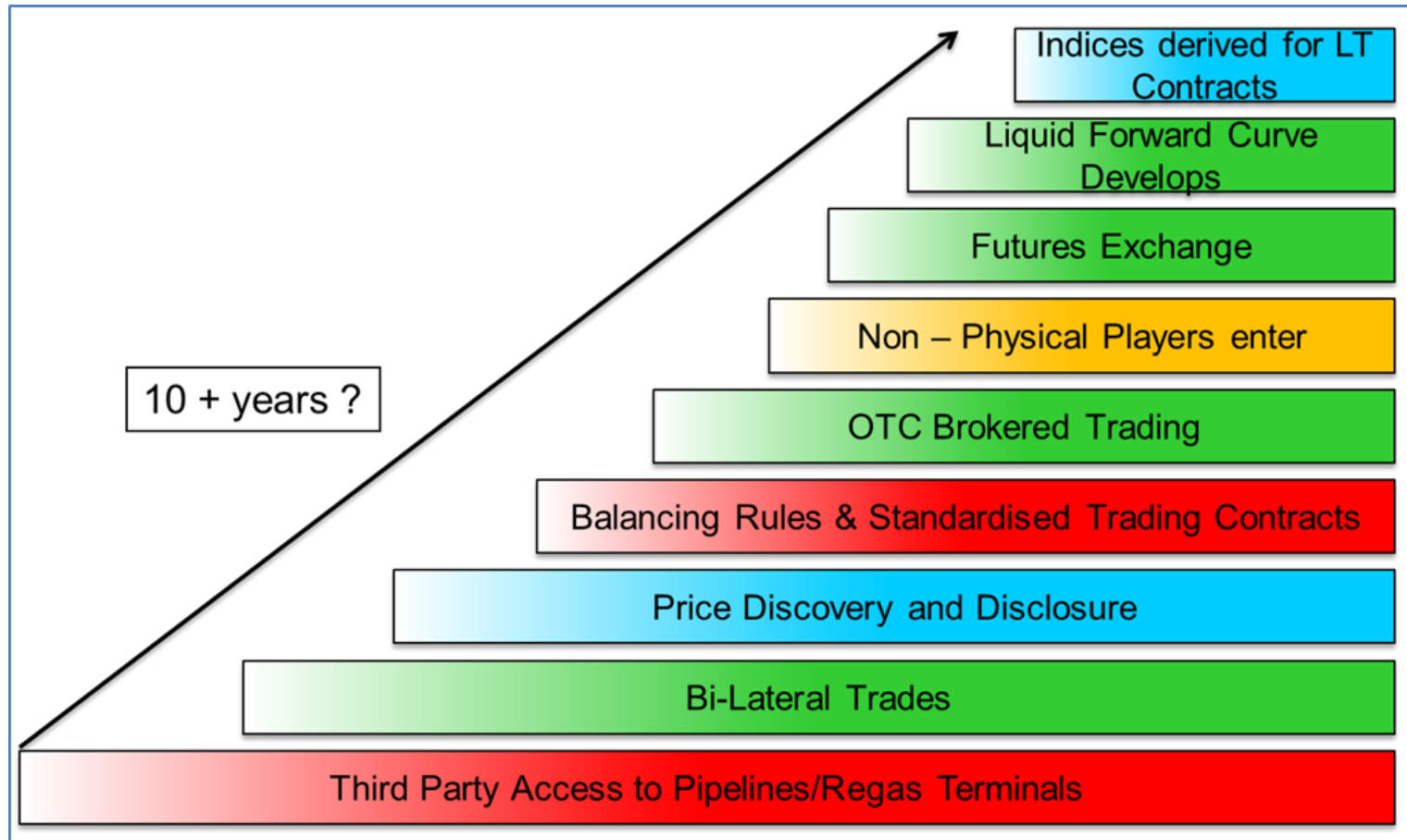
THE 'NEW WORLD' HUB-BASED GAS MARKET:

all producers bring their gas supplies to the hub market, usually the gas grid situated in the demand area;

all buyers make their purchases from the hub, including exports (whether national or international) from the hub to another;

re-trading takes place

What constitutes a 'good' hub?



Source: Heather (2015)

The 'Path to Maturity' starts with Third Party Access and, over a period of time, develops to provide first OTC then financial products, ending with Indices used as reference prices in physical contracts

Mature Traded Hubs

- ‘Mature’ traded hubs **have**:
 - Good **liquidity**, good **volumes**, often high **volatility**
 - Often a **benchmark**
 - Are a true market place, **reflective of supply/demand**
 - Not just a physical transfer point but also attracting ‘**speculative**’ trading
- ‘Mature’ traded gas hubs **are**:
 - **Henry Hub**: the first traded gas hub and **the** North American benchmark
 - **NBP**: the first traded gas hub in Europe and **the** British and NWE Sterling benchmark
 - **TTF**: has developed to be the Continental Leader and **the** European Euro benchmark

The change in gas price formation that has necessitated a robust and reliable marker price to be able to risk manage gas portfolios



Market development hurdles

Liquidity and transparency are key but assessment needs defined measures and criteria

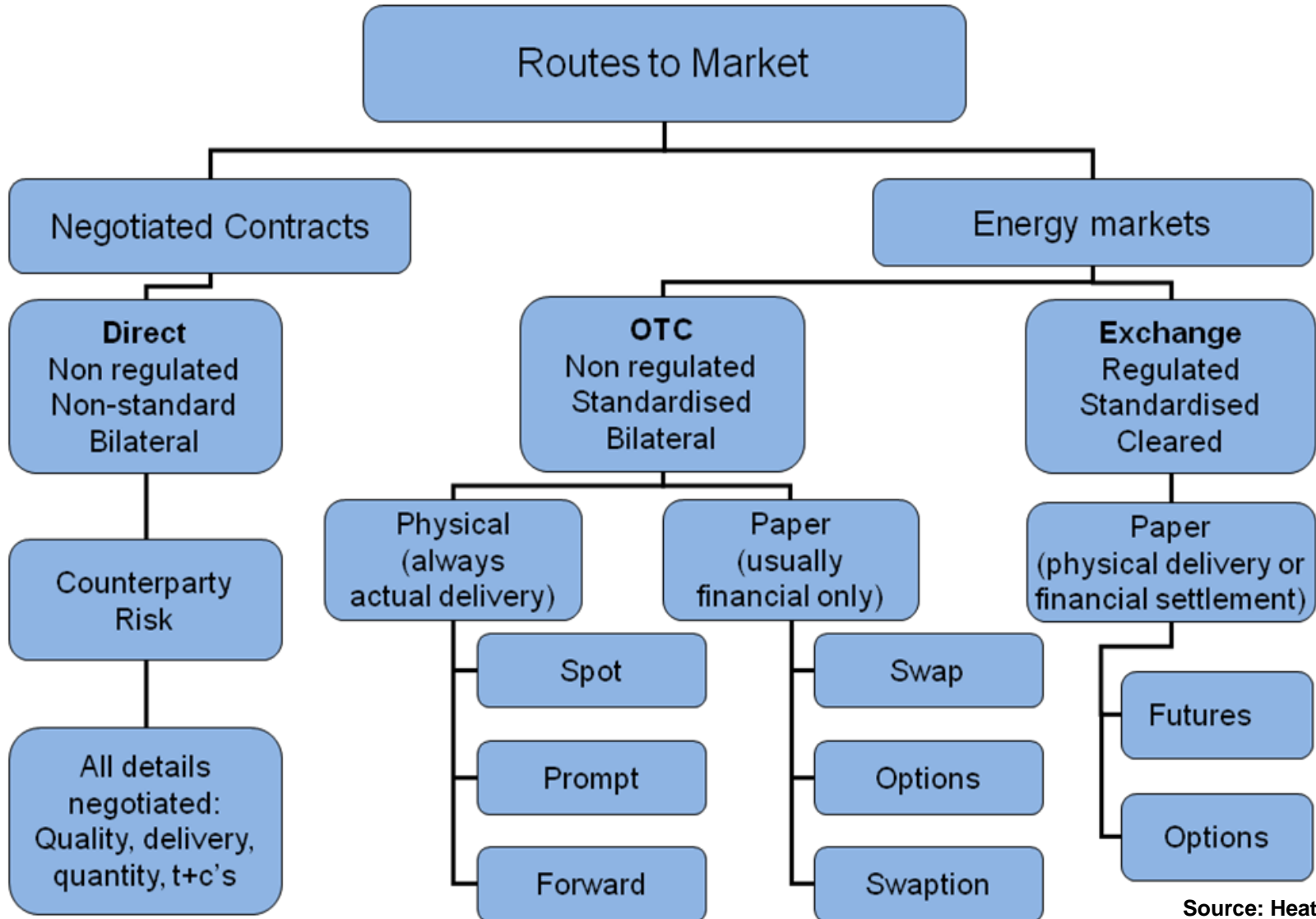
Physical connectivity is also key to realise the EU's aim for regional Market Areas

Political willingness and **cultural attitudes** to trading are also key to the development of successful gas trading hubs

Even if these hurdles can be overcome, there also needs to be **commercial acceptance** for trading to flourish

These hurdles need to be overcome if a traded gas market is to succeed

Routes to Market



Source: Heather (2010)

Mature OTC gas markets: their function

- **Open and Transparent markets:**
 - Foster trading, competition and, ultimately, the ‘best’ or ‘right’ price at any given time
 - Attract many participants of different types who bring liquidity
- **Liquid markets allow for the ability to:**
 - Physically adjust portfolio volumes over time
 - Financially risk manage gas portfolios
- **Mature gas markets can help provide:**
 - Security of supply and security of demand
 - Providing a market place for the buying and selling of, usually, marginal quantities of physical gas

Most of all, mature, open, transparent and liquid markets provide secure Risk Management tools

Gas exchanges: their role and function

- **Price Discovery & Transparency**
 - The ability to know the price of gas now and in the future (up to six years ahead on ICE NBP and five years for ICE-Endex TTF)
 - Publicly and easily accessible
- **Supply/Pricing flexibility**
 - The ability to separate price function from supply function
- **Physical balancing**
 - Providing a market place for the buying and selling of, usually, marginal quantities of physical gas
- **Risk Management**
 - Providing a facility for managing price risk through a **secure and regulated market** – hedging and trading

Exchanges are complementary to the OTC markets and assist in the development of traded gas hubs in a secure, regulated environment



Thank you!

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