

„Sektor paliw i energii wobec nowych wyzwań”.



15 października 2018 roku, DW „Kościelisko” Zakopane

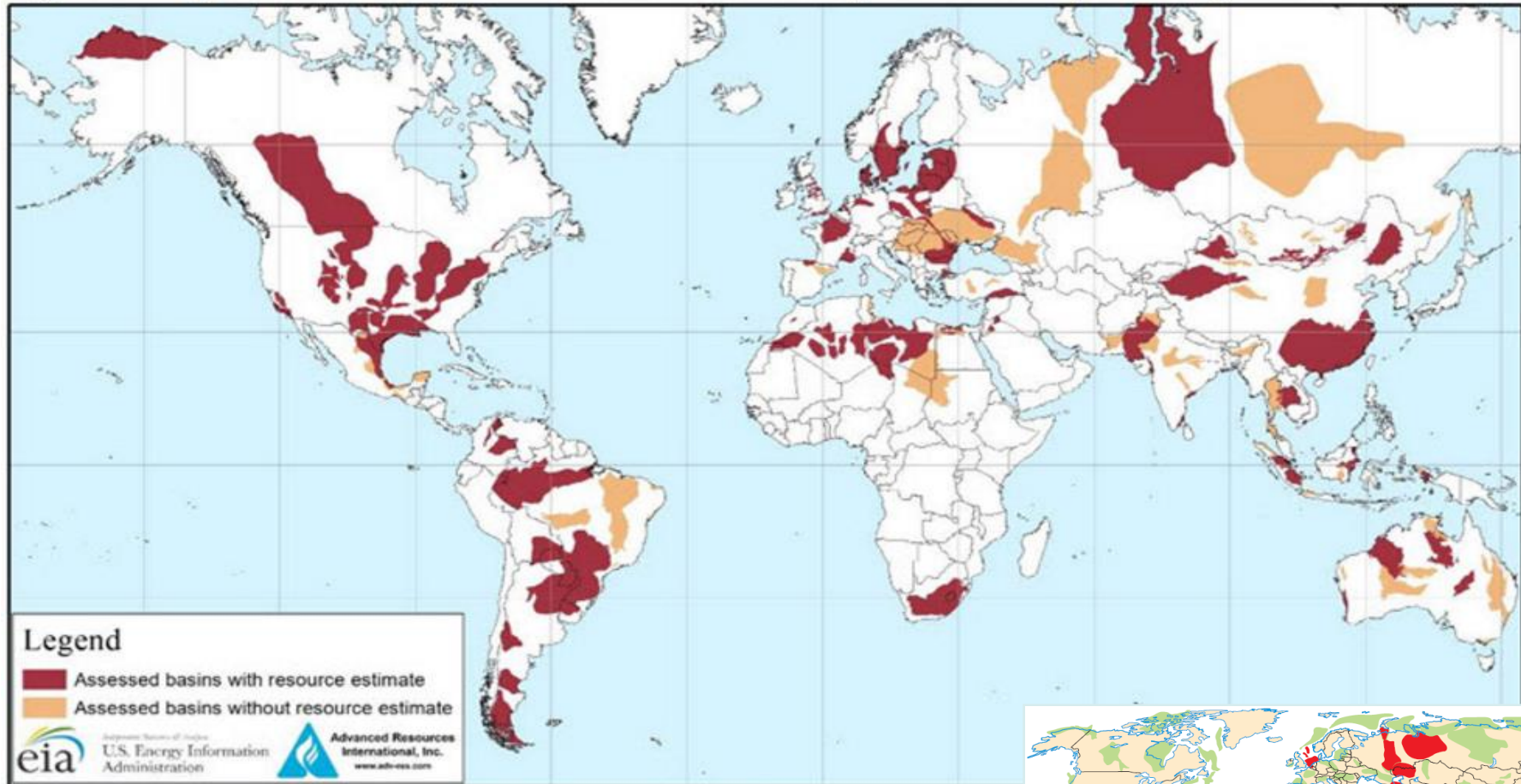
Nowa era w światowym rynku LNG.

Mateusz Piotr Sikora
Andrzej Paweł Sikora

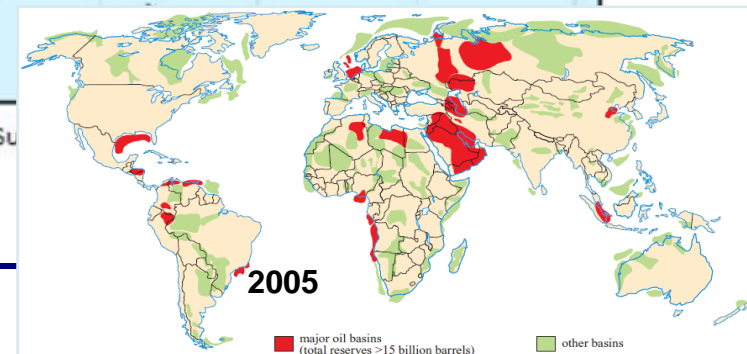


14 - 17 październik 2018 roku, DW „Kościelisko” Zakopane

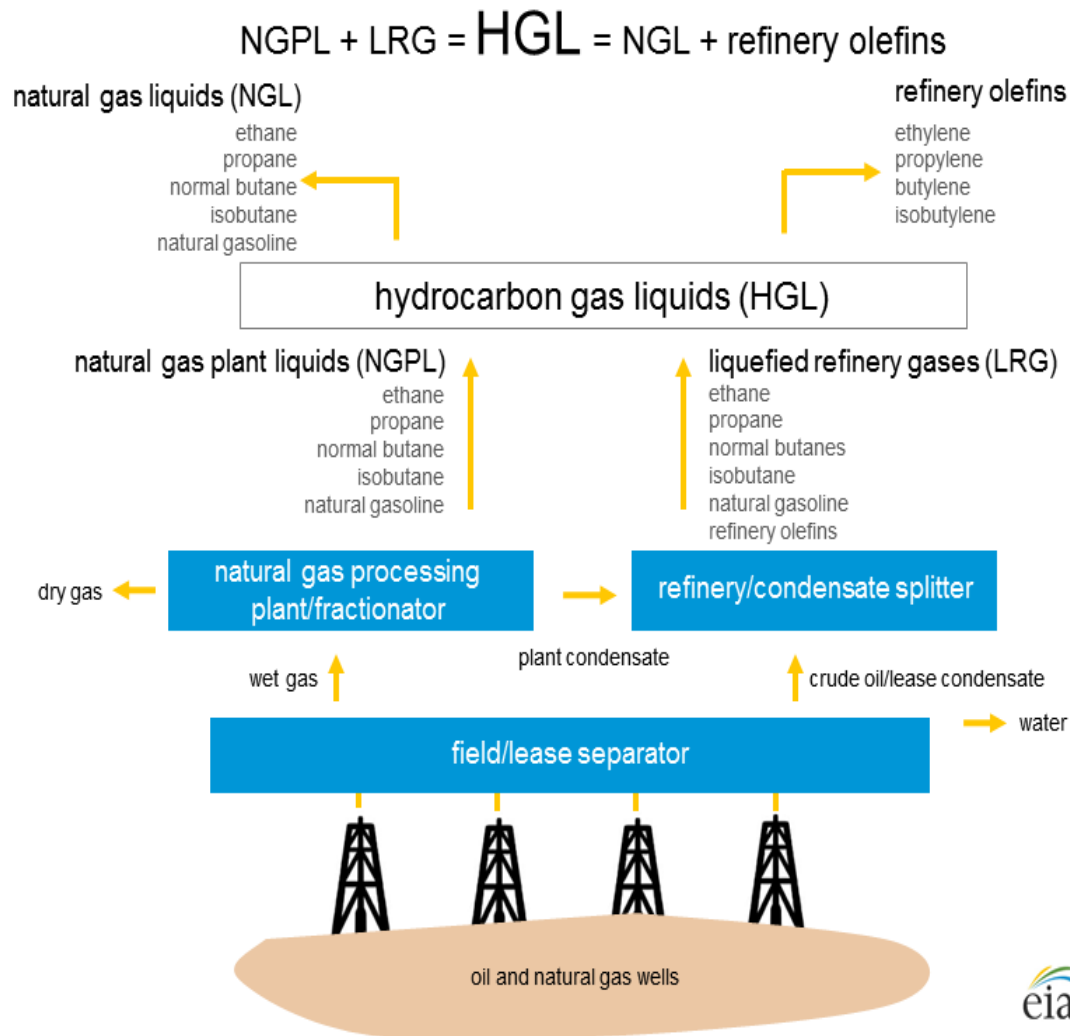
Natural Gas - Hydrocarbon Resources



Source: United States basins from U.S. Energy Information Administration and United States Geological Survey various published studies.

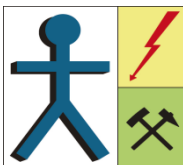


Sources, production, and types of hydrocarbon gas liquids



Source: U.S. Energy Information Administration

Source: Own analysis based on: „EIA Outlook 2015 - 2017”

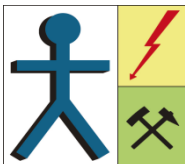


LNG - Spot + transshipment

Russia's first Arctic LNG terminal



- „Dutch Gate terminal positions itself as LNG transshipment hub for Russian Yamal volumes (Maasvlakte in Rotterdam 12 bcm/y)
- Yamal LNG's first cargo lands at Grain LNG terminal (UK - KENT)
- Spain receives second Yamal LNG cargo (operator Reganosa, Mugardos terminal in the port of Ferrol). [...]"



Overview

The Outlook examines the energy transition...

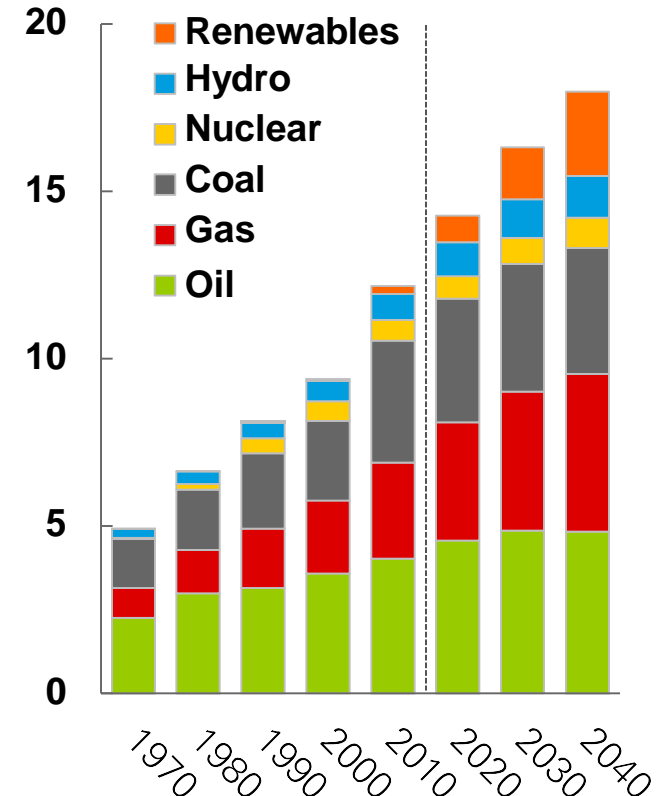
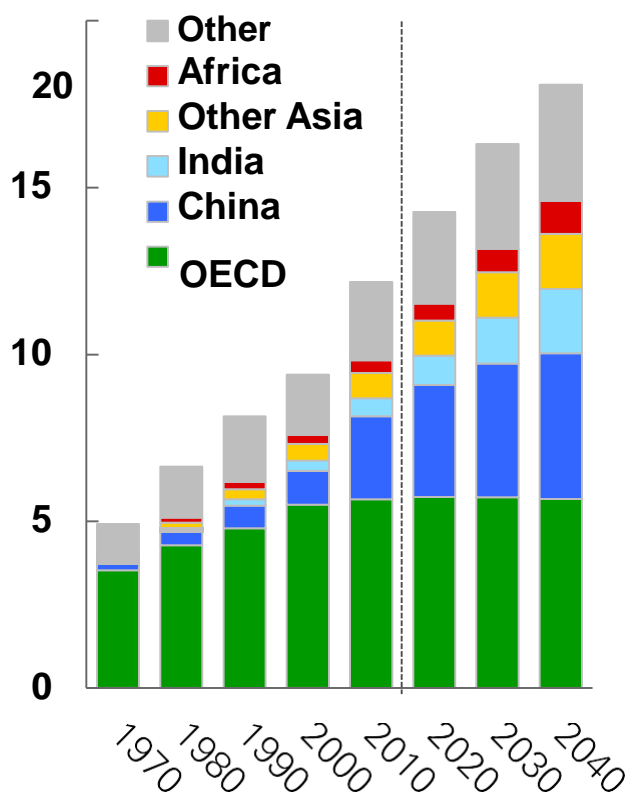
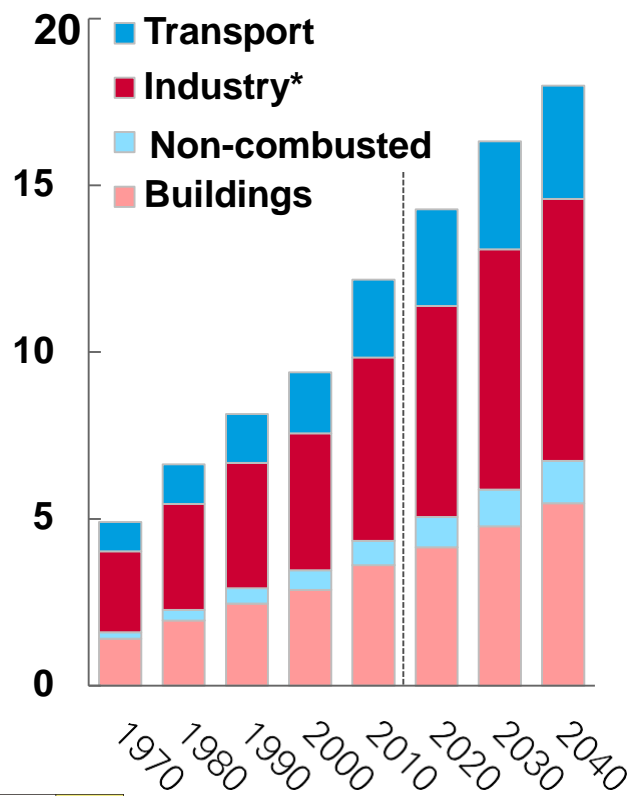
Primary energy demand

End-use sector

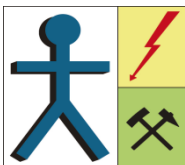
Region

Fuel

Billion toe



*Industry excludes non-combusted use of fuels



Natural gas grows strongly, with broad-based demand...

Fuels: Natural gas

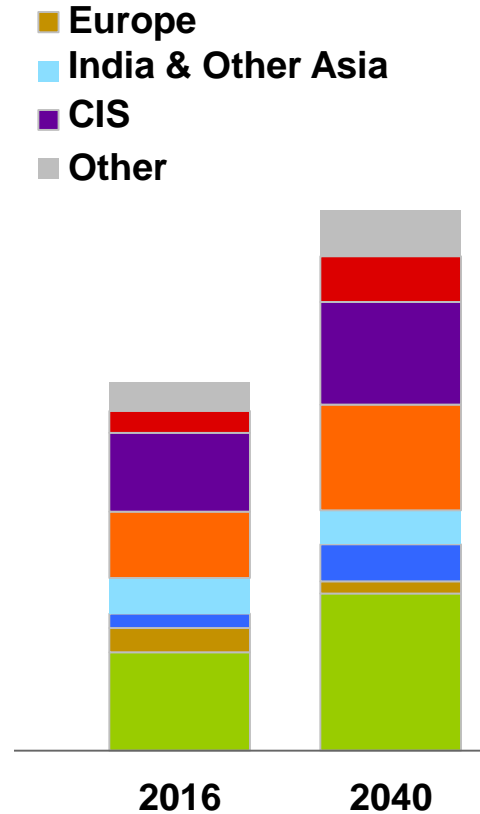
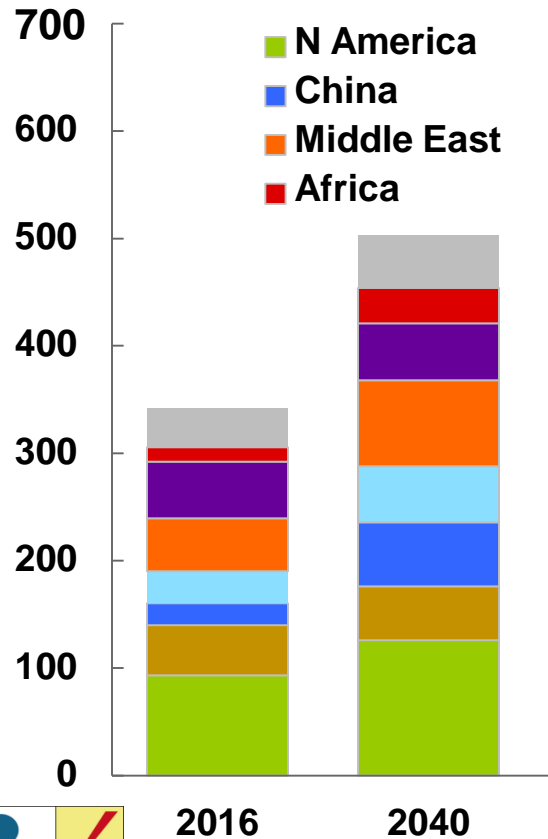
Natural gas

Consumption

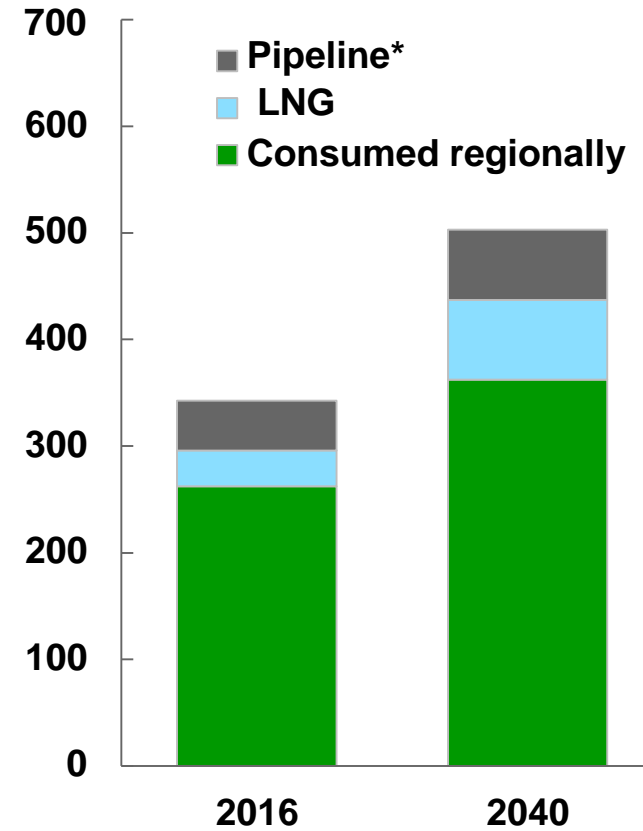
Production

Trade

Bcf/d



Bcf/d

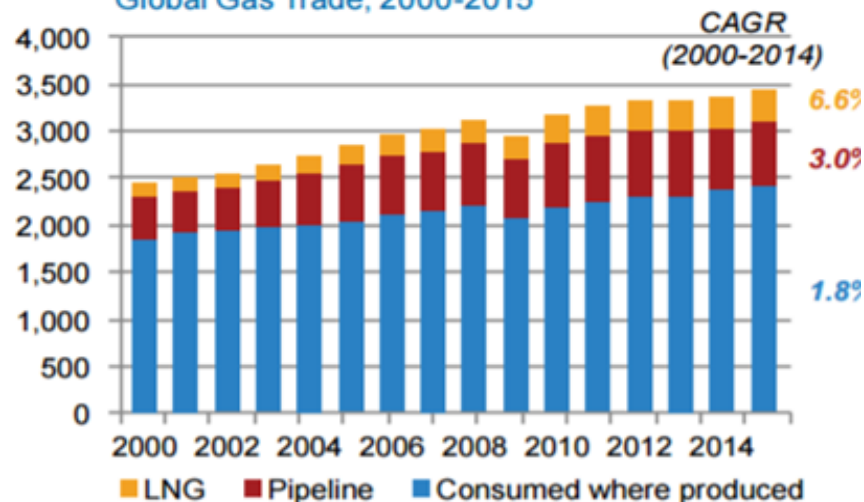


*Pipeline gas refers to inter-regional pipeline trade

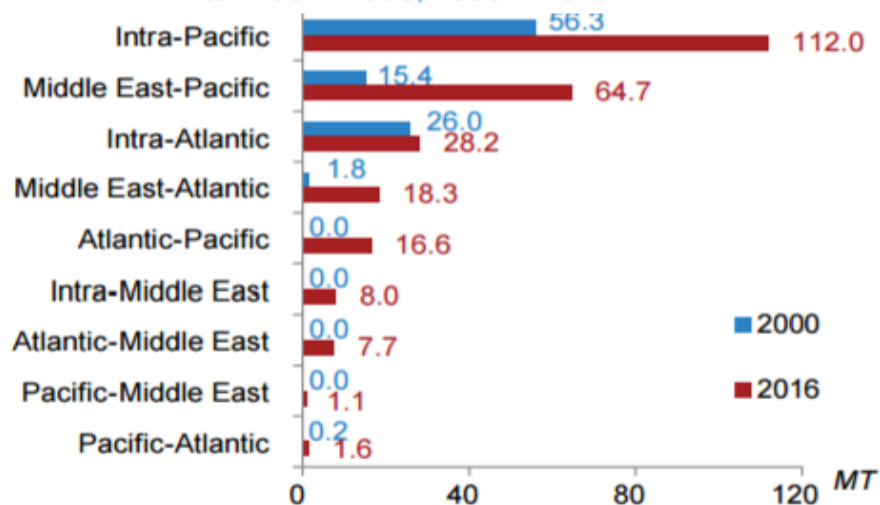
Zmiany na rynku gazu ziemnego

- Ogromna większość gazu ziemnego **jest używana lokalnie**.
- Systematycznie rośnie światowa rola LNG rośnie systematycznie. **Kluczem umowy krótkoterminowe**.
- Międzynarodowy handel LNG zmienia się globalnie.

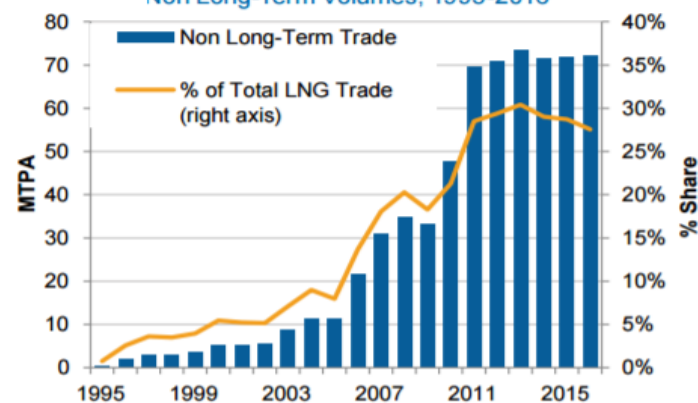
Global Gas Trade, 2000-2015



Inter-Basin Trade, 2000 v. 2016

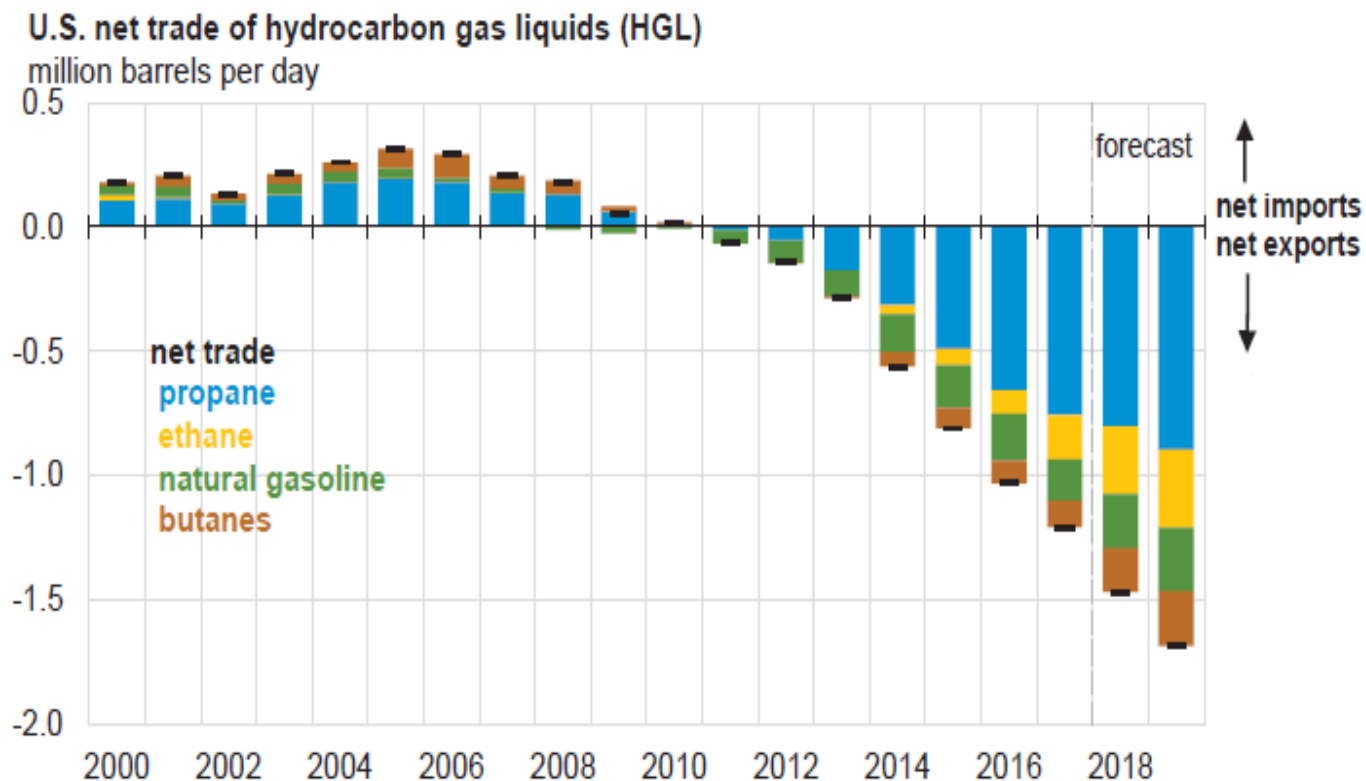


Non Long-Term Volumes, 1995-2016

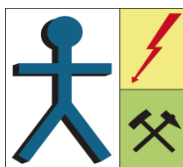


Rynek amerykański – handel HGL

zmiana netto



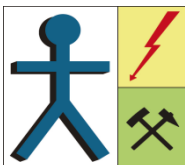
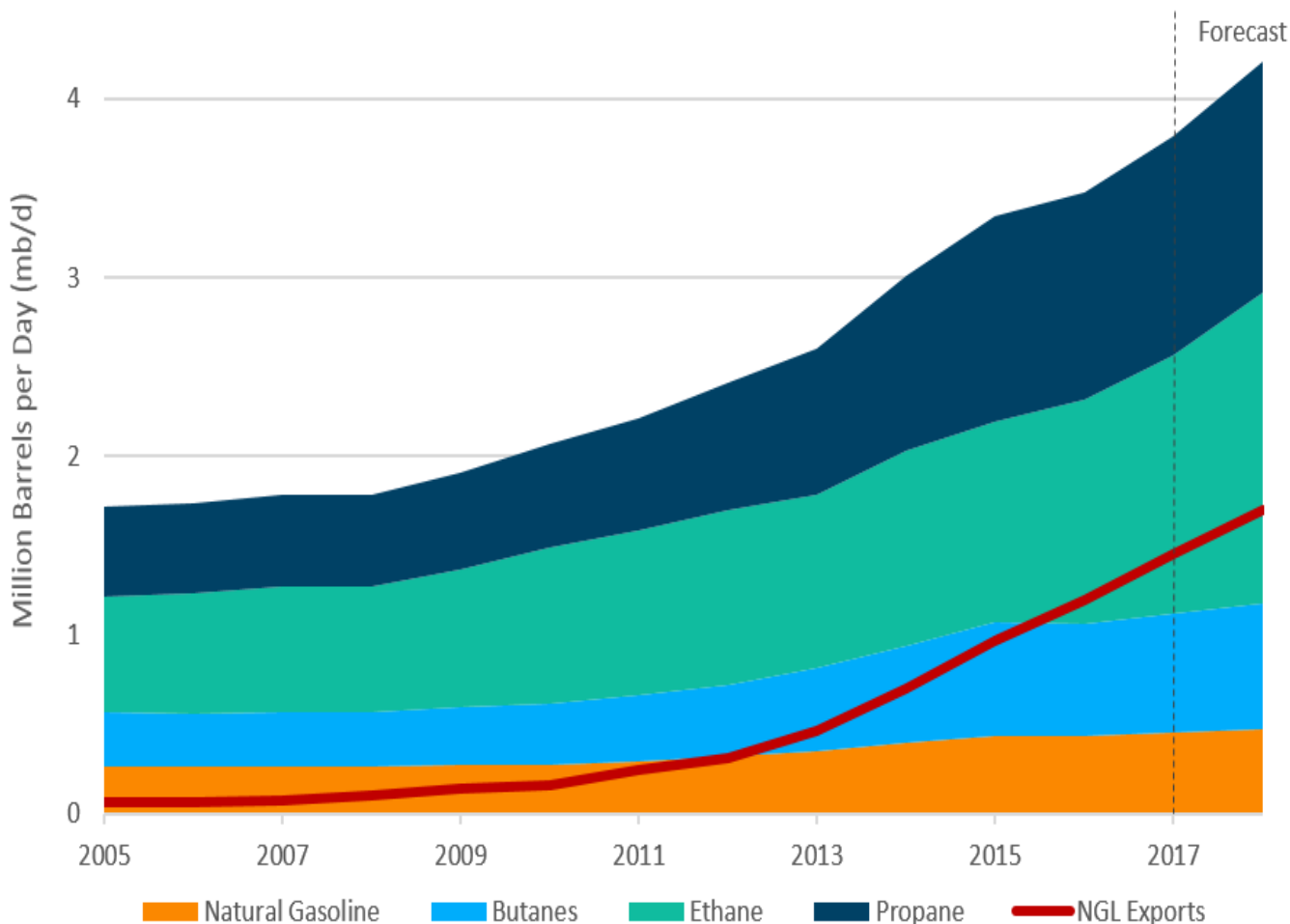
Source: Short-Term Energy Outlook, September 2018



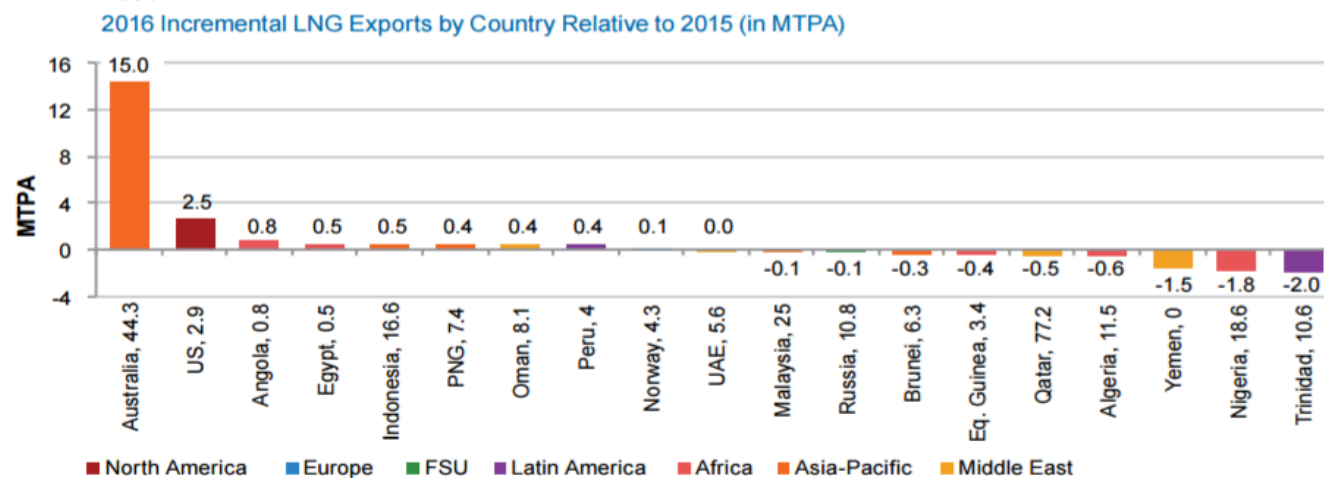
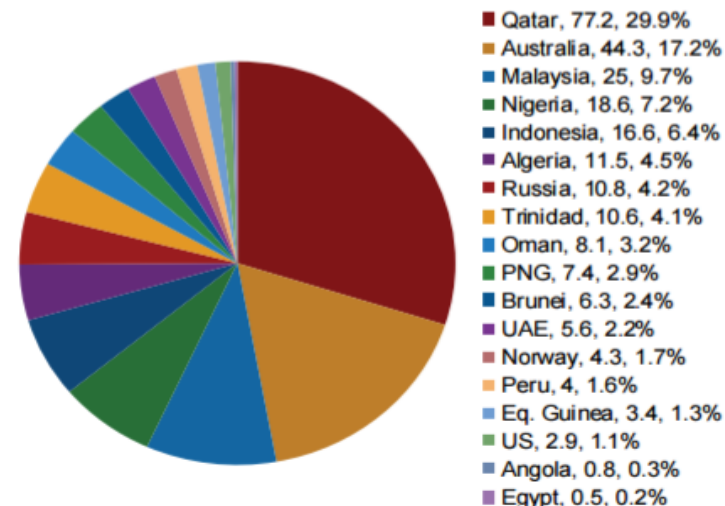
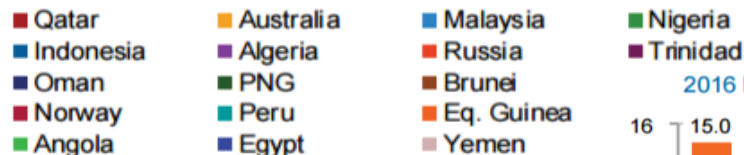
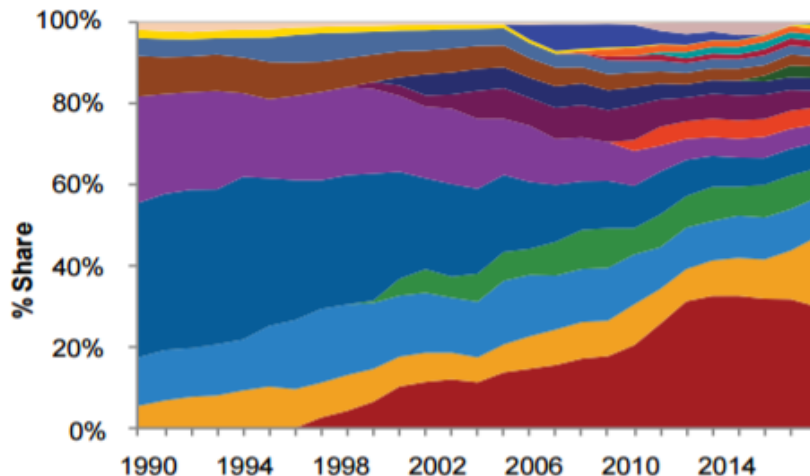
Rynek amerykański – eksport HGL

wydobyte / eksport wg produktów

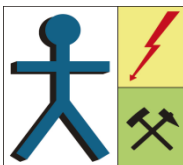
U.S. Natural Gas Liquids Exports and Production by End Product



Eksporтеры LNG - 2017

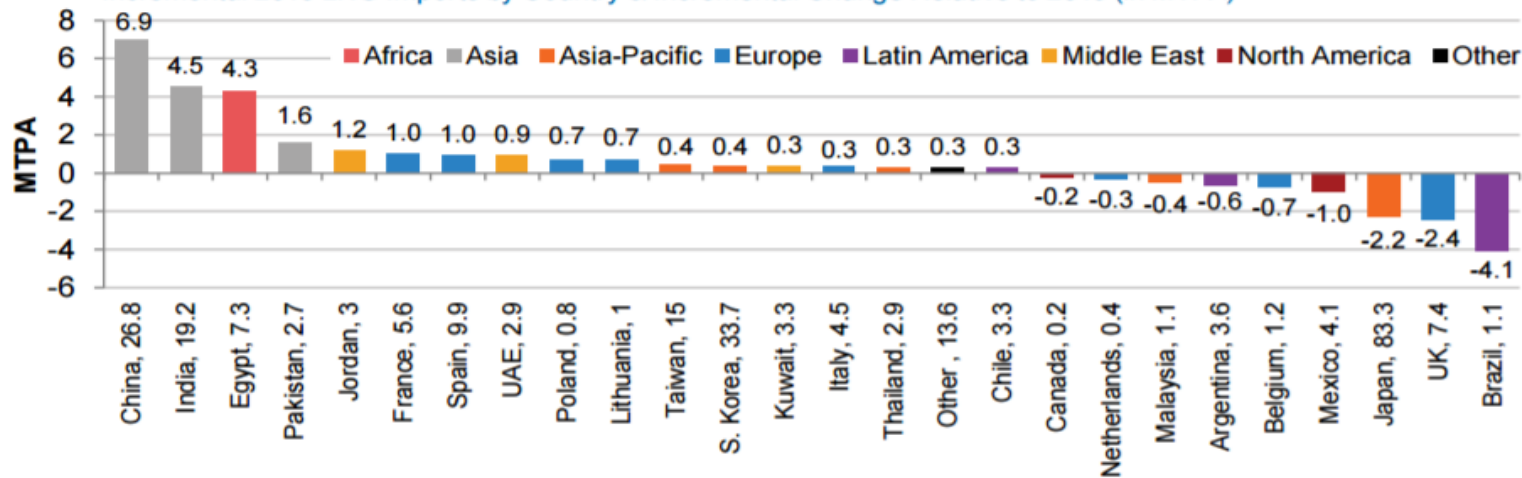


Źródło: International Gas Union,
„World LNG Report 2017”

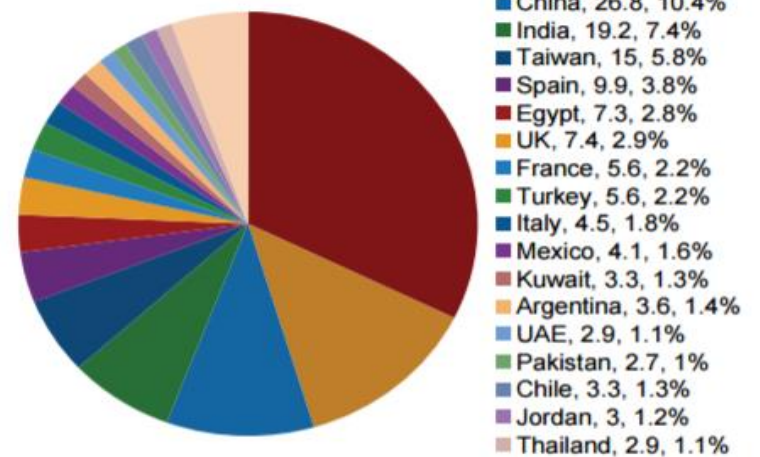


Importerzy LNG - 2017

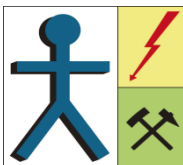
Incremental 2016 LNG Imports by Country & Incremental Change Relative to 2015 (in MTPA)



- Więcej niż 70% importu (256 mln tons) jest generowane przez kraje Azji.
- Pięciu największych importerów LNG pochodzi z Azji.



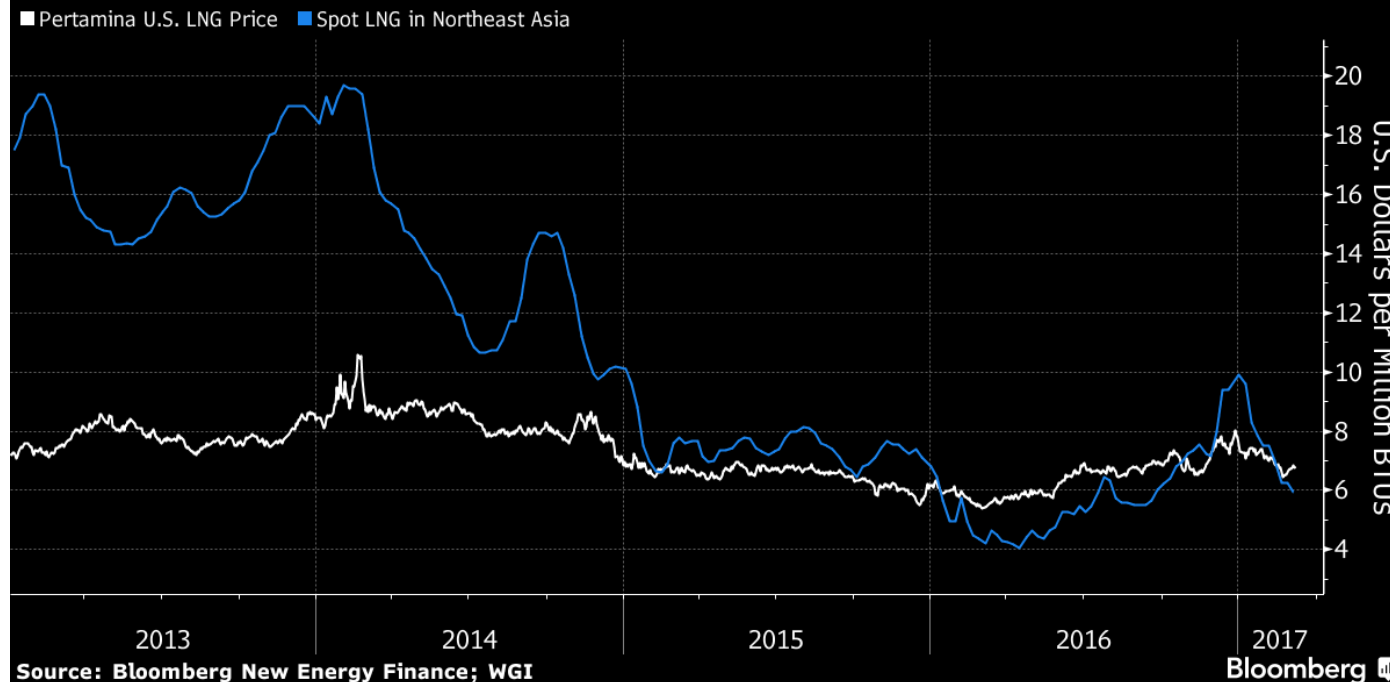
Źródło: International Gas Union, „World LNG Report 2017”



LNG swaps

Shrinking LNG Gap

The oil price crash has eliminated the discount U.S. LNG has to world prices



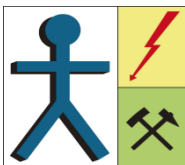
- **Pertamina in LNG swap talks with international energy firm**
- **GAIL said to be talking with Dong and PetroChina on swap deal**

More Asian LNG buyers are trying to avoid taking the U.S. supplies they signed up for just a few years ago in order to cut shipping costs.

GAIL India Ltd. and Indonesia's PT Pertamina are both seeking to trade liquefied natural gas cargoes they are contracted to buy from the U.S. in exchange for supplies shipped from projects closer to home.

They're following buyers such as Tokyo Gas Co. in trying to avoid deliveries of LNG from the U.S. after the global oil price crash reduced the discount of American gas relative to other suppliers. That's made minimizing shipping distances more vital to buyers looking to reduce freight costs.

GAIL, India's state gas utility, is seeking agreements with Denmark's Dong Energy and PetroChina Co. to swap about 1 million tons a year of U.S. LNG for delivered supplies to cut shipping costs and time, according to people with knowledge of the plans. The company has a separate deal with Swiss trader Gunvor Group in which GAIL will receive LNG this year in exchange for U.S. cargoes next year.



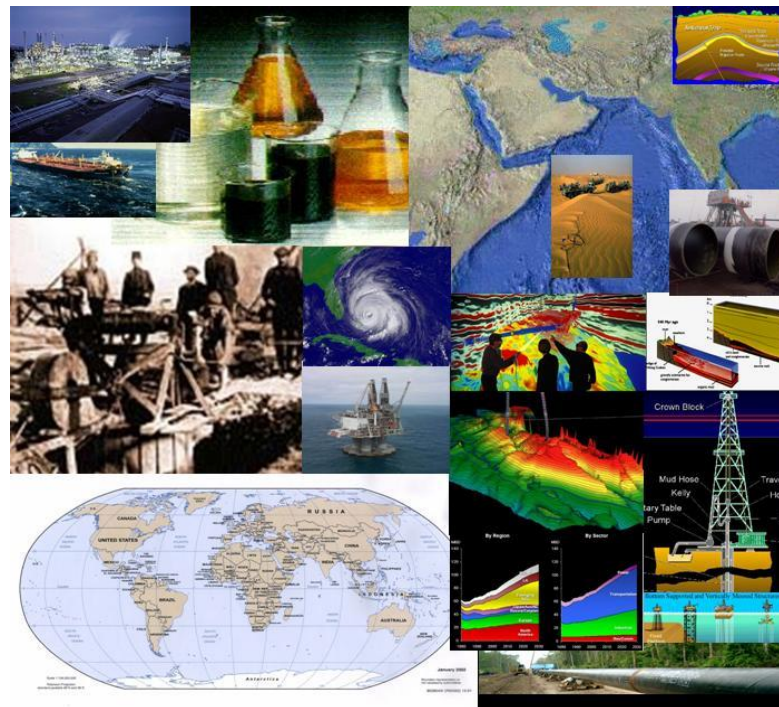
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Dziękuję za uwagę 😊

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