



Iran

Petrochemical Industry

Dec 2014





NPC Organization Chart

Ministry of Petroleum

National Petrochemical Co. (NPC)

Projects

**Production
Control**

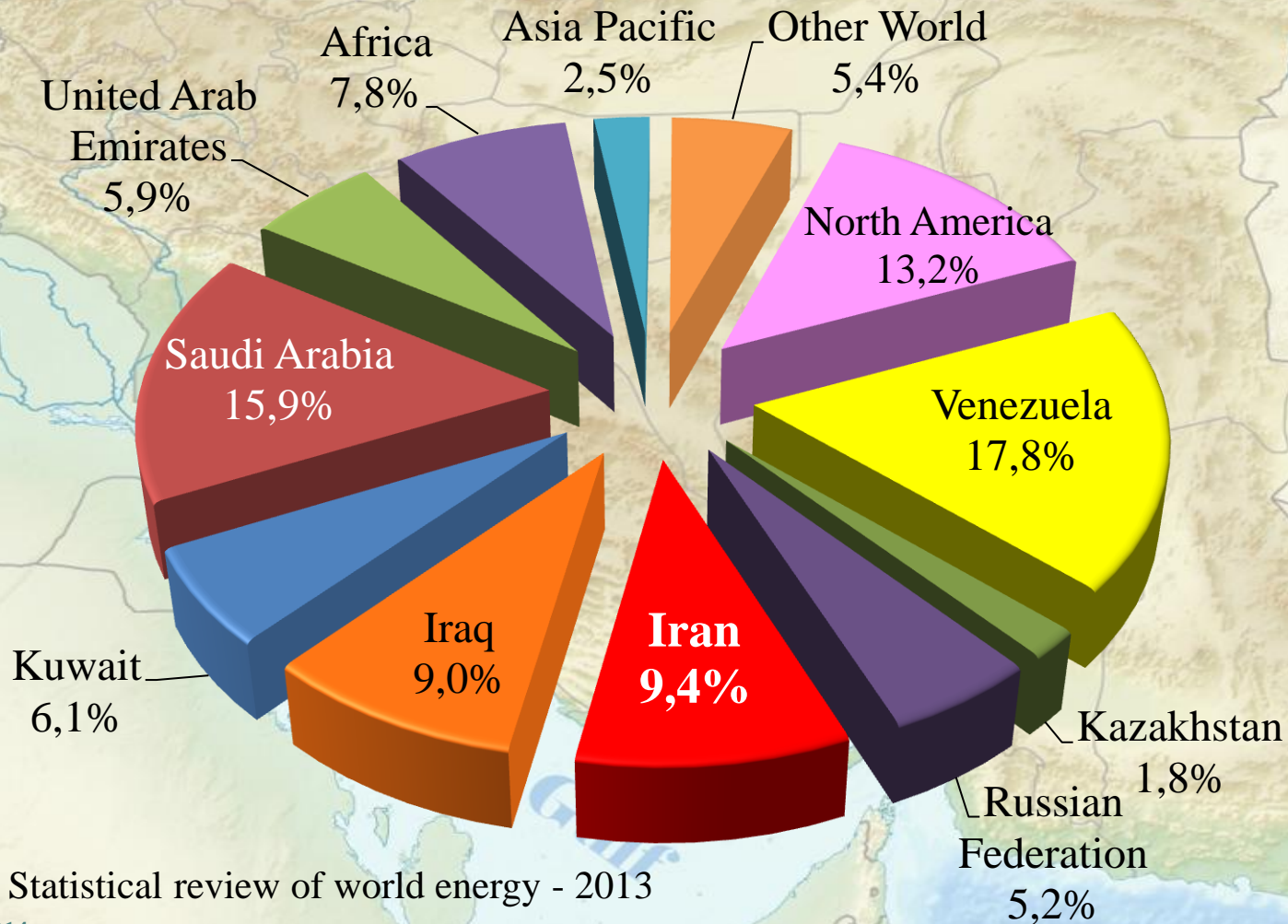
**Planning &
Development**

**Administration
& Training**

Finance

Iran's Proven Oil Reserves

Global Crude Oil Proven Reserves (End of 2012)
1,669 billion barrels

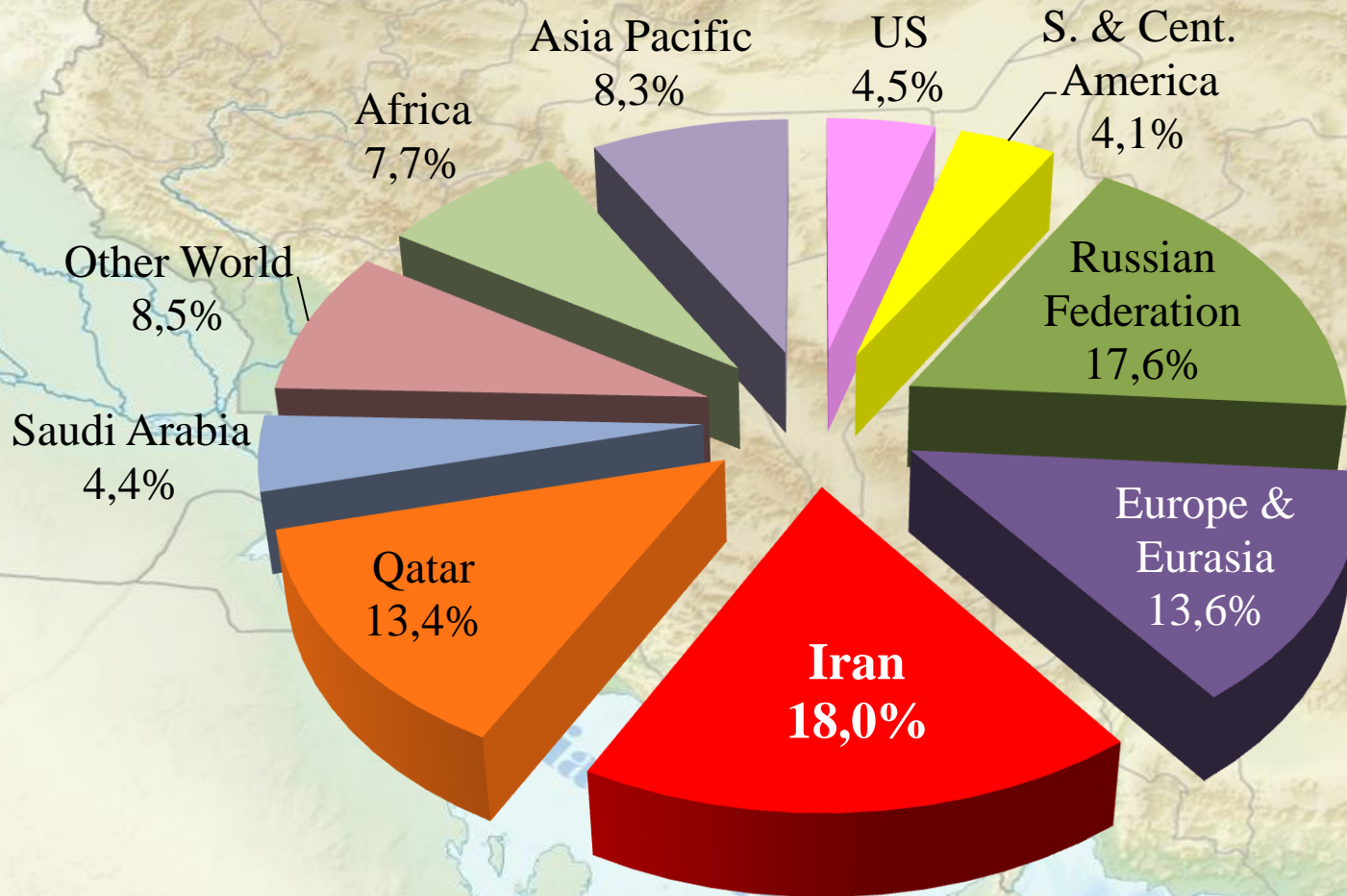


Source: BP - Statistical review of world energy - 2013

Dec 2014

Natural Gas Proven Reserves

Global Natural Gas Proven Reserves (End of 2012):
187.3 trillion cubic meters



Source: BP - Statistical review of world energy - 2013



Major Advantages of Iran's Petrochemical Industry

Iran has numerous advantages in petrochemical industry

- ◆ **Availability of colossal oil-based feedstock (world's 4th largest oil reserves)**
- ◆ **Availability of huge gas resources containing over 10% C₂+ in gas-phase (world's 2nd largest natural gas reserves)**
- ◆ **Well-developed export & import infrastructure (ports, ...)**



Major Advantages of Iran's Petrochemical Industry

- ◆ **Access to international waters**
- ◆ **Large & growing domestic market**
- ◆ **Qualified and trained manpower**
- ◆ **50 years of experience in petrochemical industry,
the oldest in the Middle East**

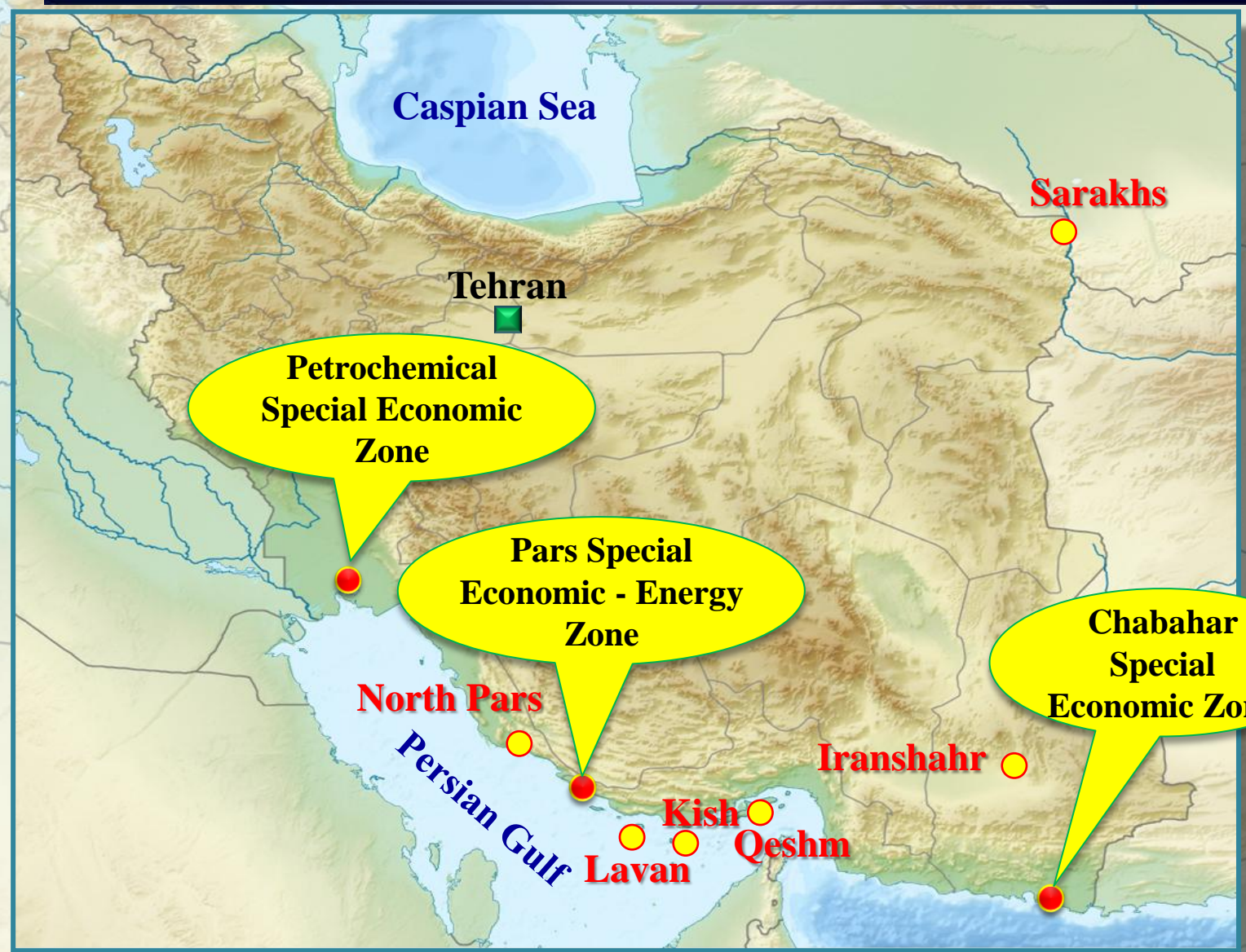


Major Advantages of Iran's Petrochemical Industry

- ◆ **Proximity & access to European and Asian markets especially the huge Indian & Chinese marketplaces**
- ◆ **Development of metal (steel & aluminum) and other energy-intensive industries**
- ◆ **Existence of domestic engineering and availability of contracting companies & equipment manufacturers reducing costs of projects implementation**



Petrochemical Development Zones



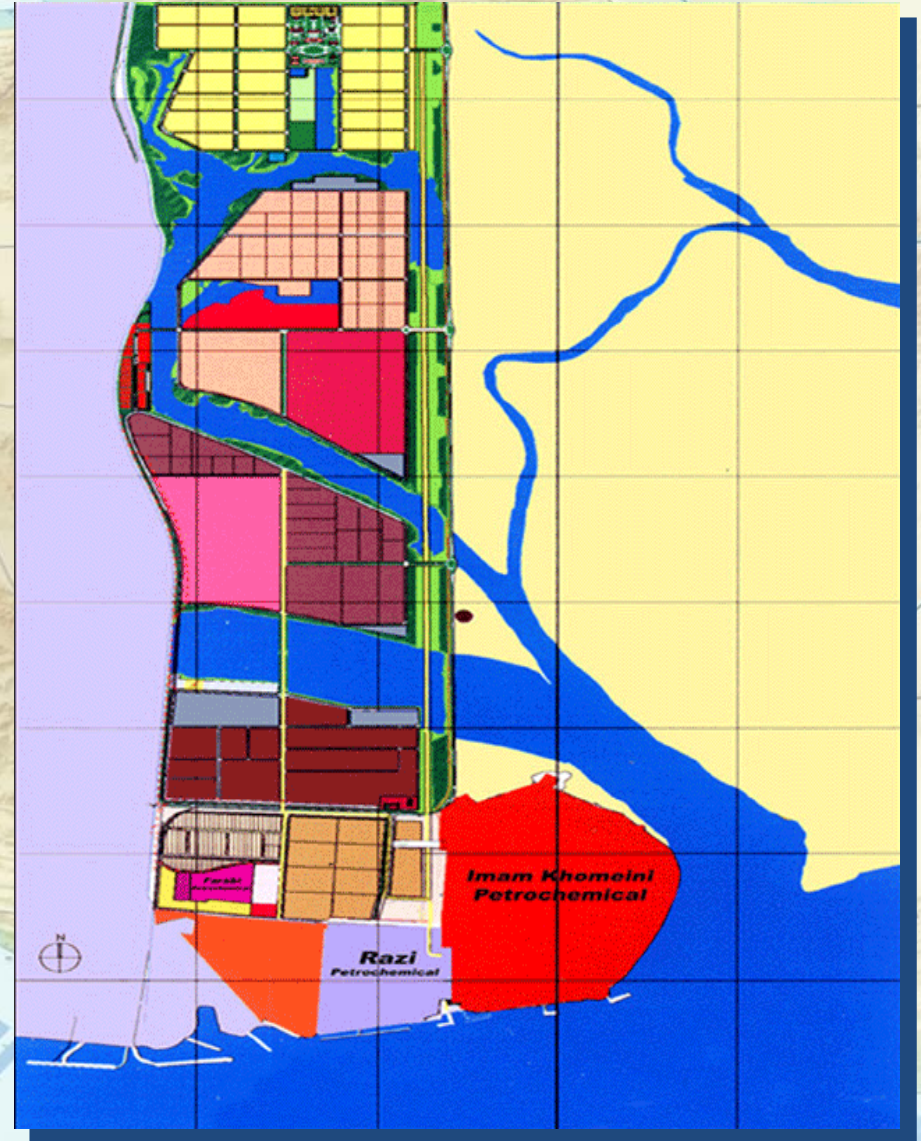


Petrochemical Special Economic Zone

Bandar Imam

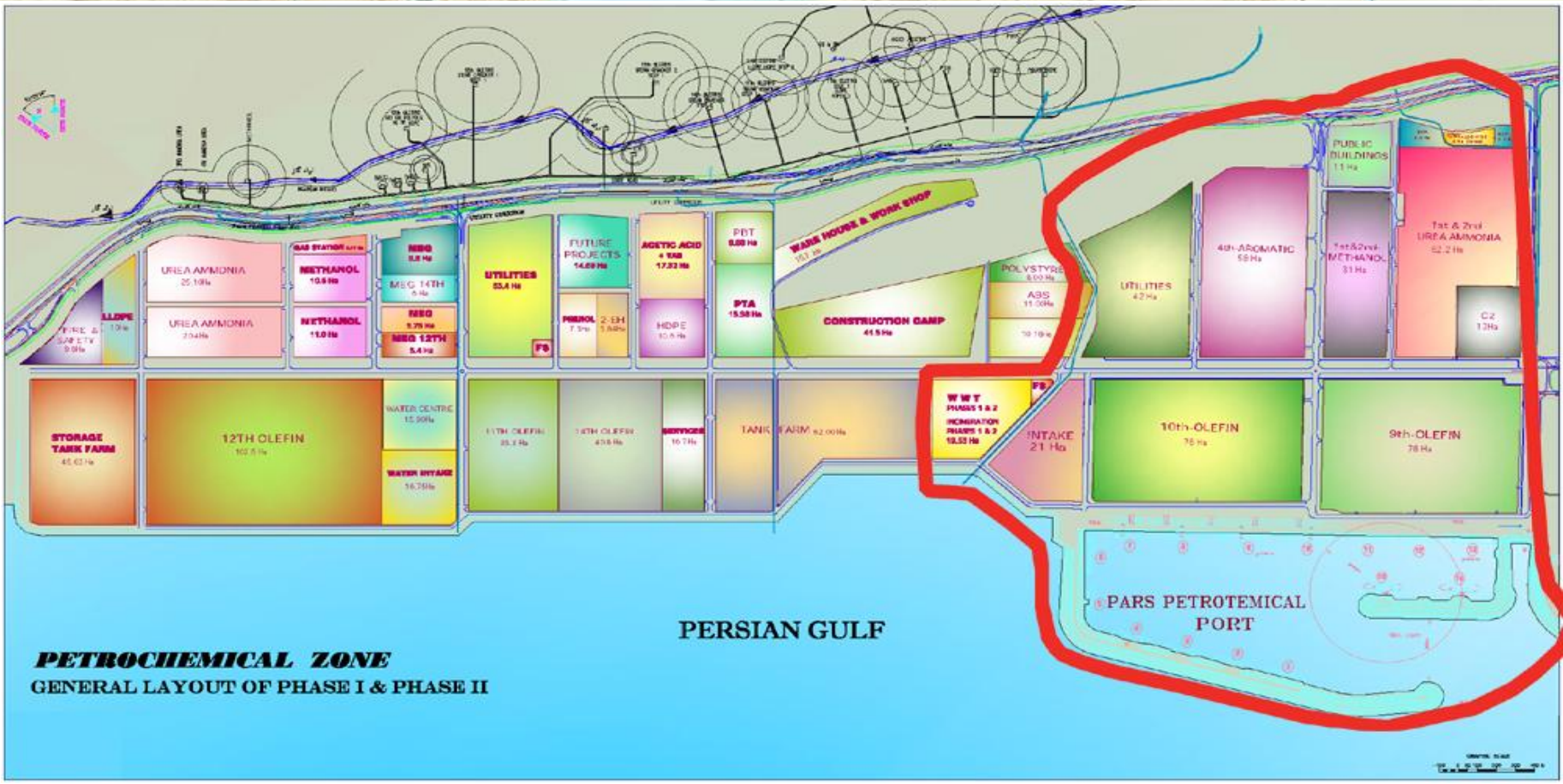
(Mahshahr)

Persian Gulf





Pars Special Economic / Energy Zone



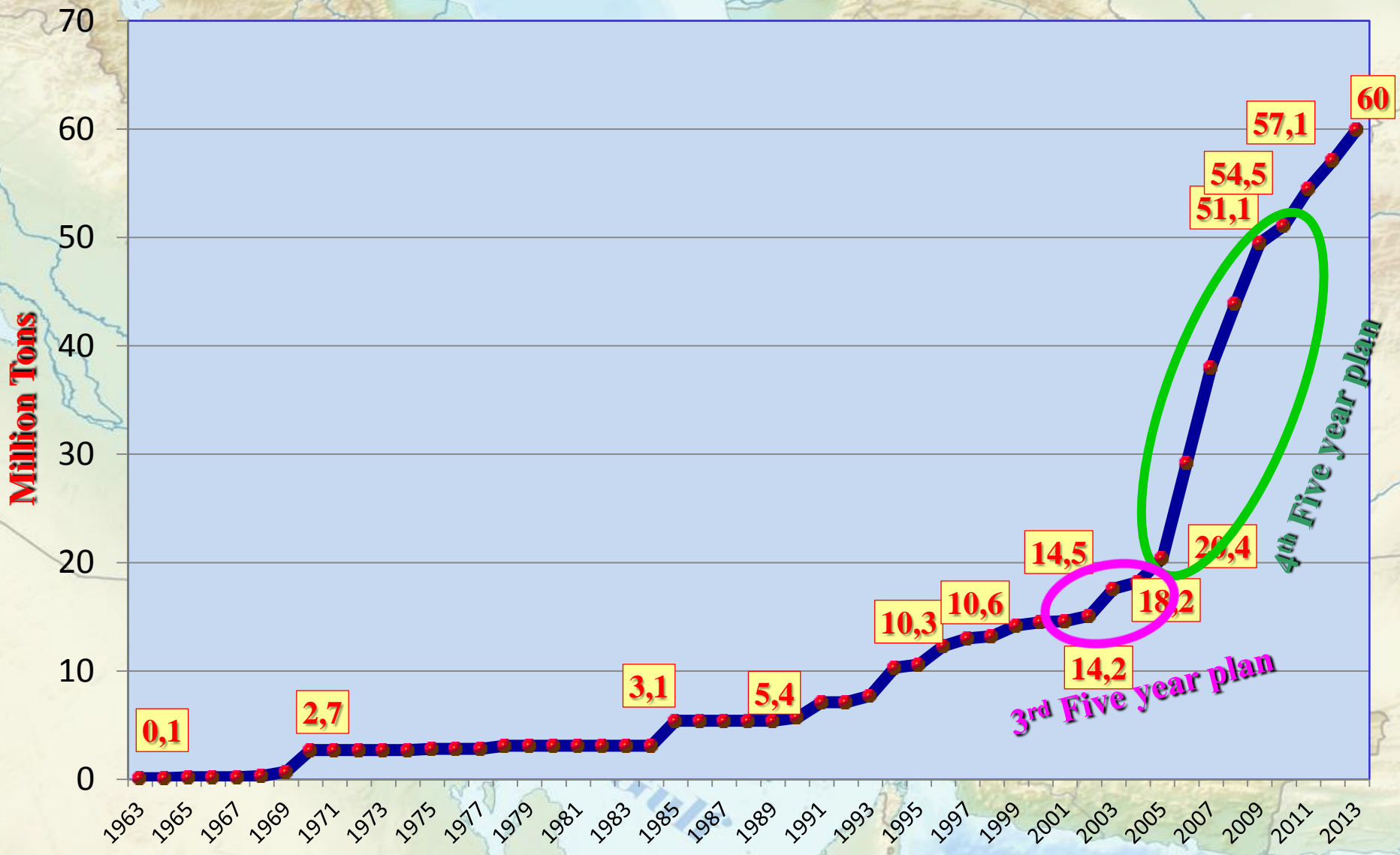
Assaluyeh

West Ethylene Pipeline



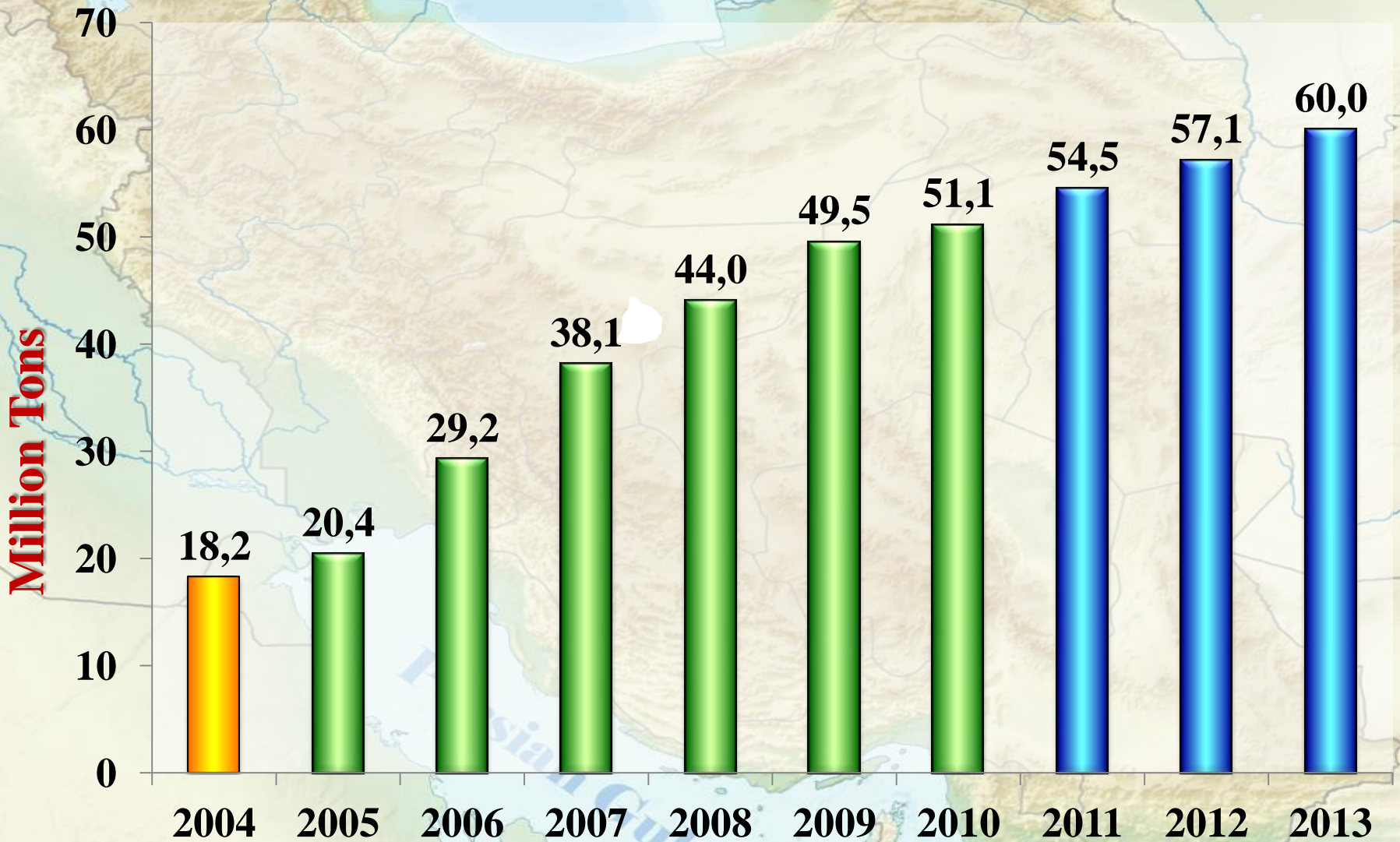


Capacity By the End of 2013



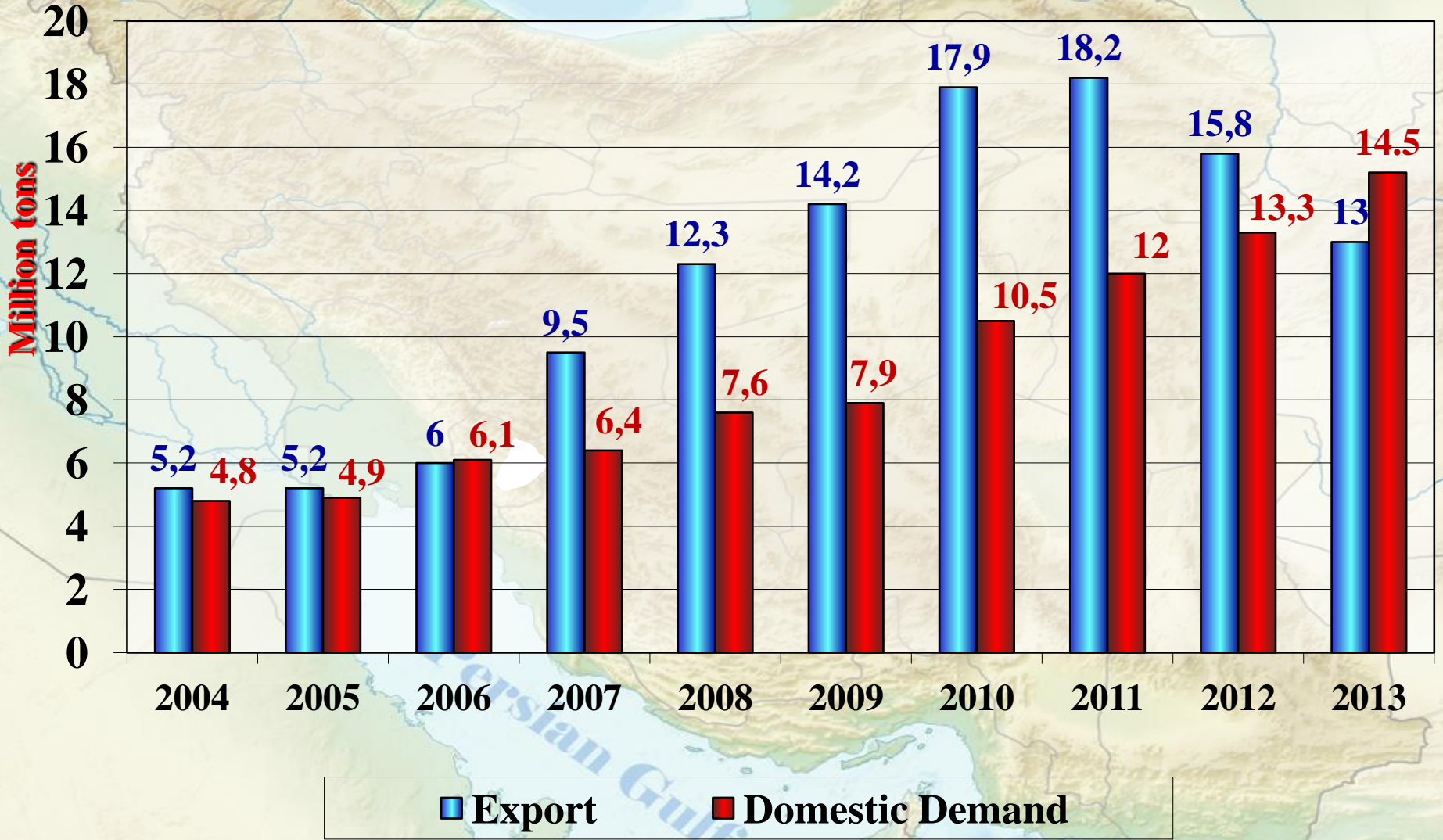


Iran Petrochemical Output Capacity Growth





Iran Petrochemical Export & Domestic Demand





Caspian
Sea

Projects

Caspian Gulf



Projects under Implementation

No. of Projects	67
Design Capacity	61 Million Tons/Yr
Products Value	32 Billion USD/ Yr
Average Physical Progress	20 %
Total Capital Investment	39 Billion USD



New Investment Opportunities

No. of Projects

36

Design Capacity

60 Million Tons/ Yr

Saleable Products

28 Million Tons/ Yr

Value of Saleable Products

30 Billion USD/ Yr

Total Capital Investment

42 Billion USD



PRIVATIZATION

- ◆ Petrochemical industry's privatization gained momentum according to Article 44 of IRAN's Constitution.
- ◆ Based on the Article, NPC, as a state-owned company has investment restriction.
- ◆ Best option for private sector investment is investing in basic, mid & downstream production chain projects.



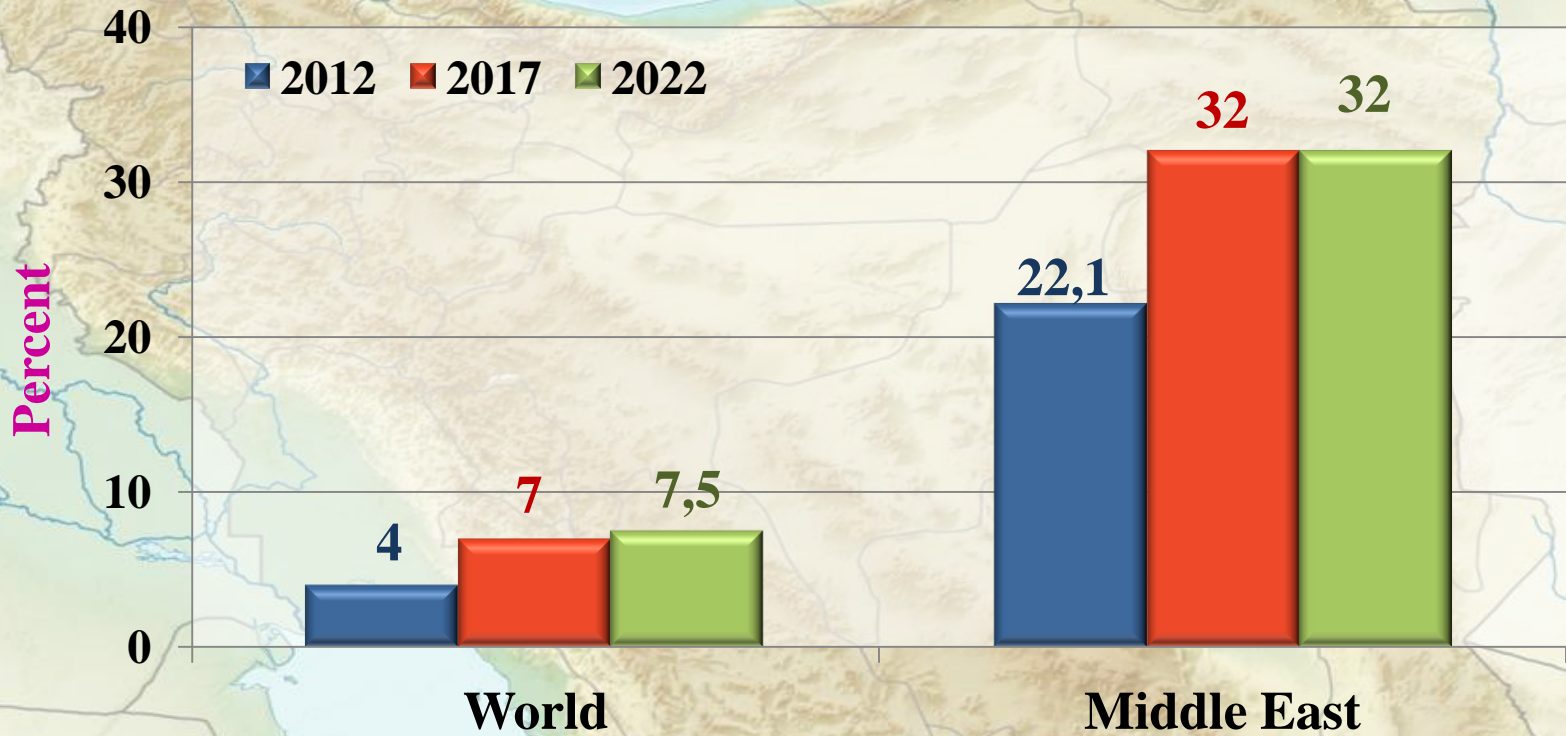
Caspian
Sea

Market

Persian Gulf



Iran's Share of the World and Mid East Ethylene Capacity

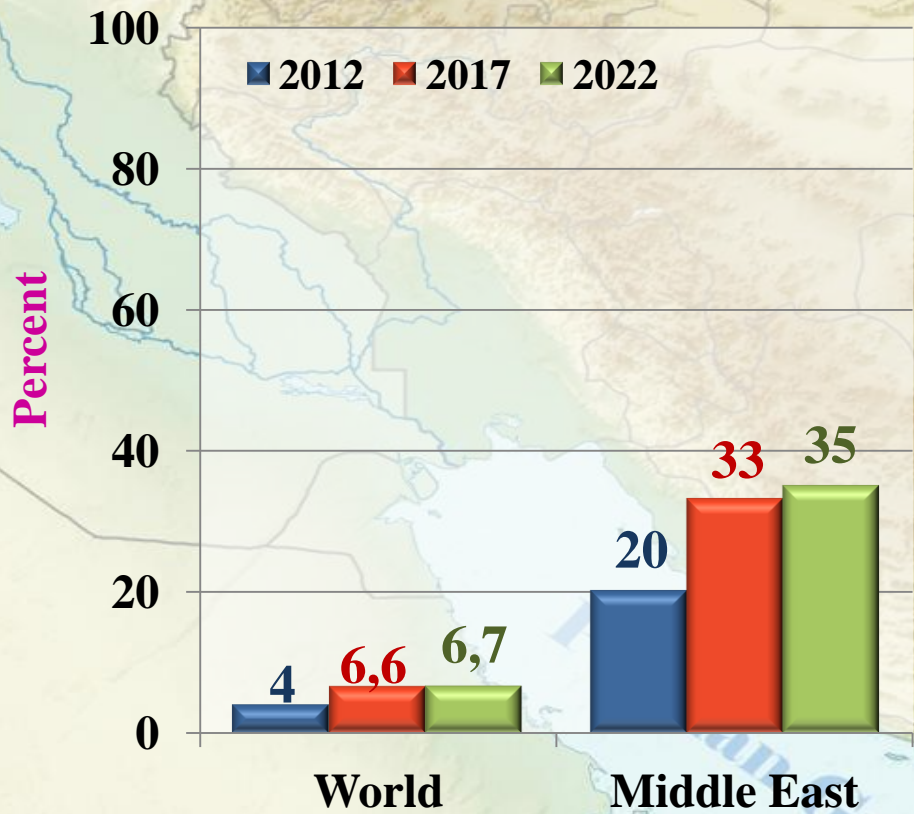


The international trade of **ethylene** is quite limited due to expenses associated with transportation. As a result, most ethylene that crosses international borders is in the form of derivative chemicals, such as polyethylene, ethylene glycol, and EDC.

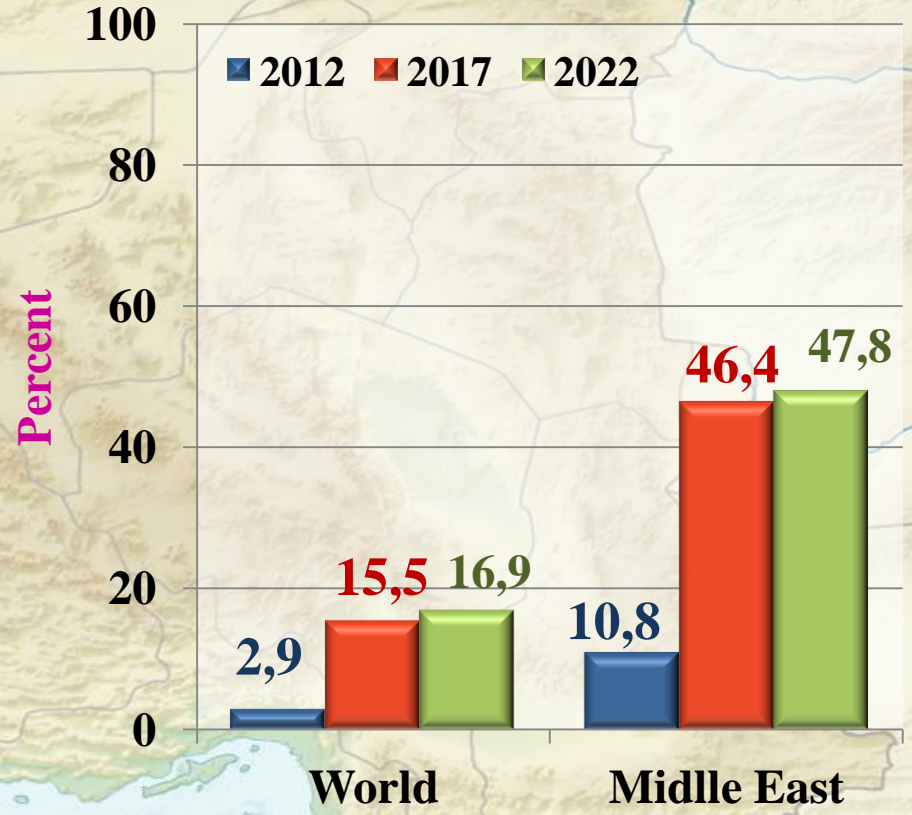


Iran's Share of the World and Mid East Polyethylene Capacity & Trade

Capacity



Trade

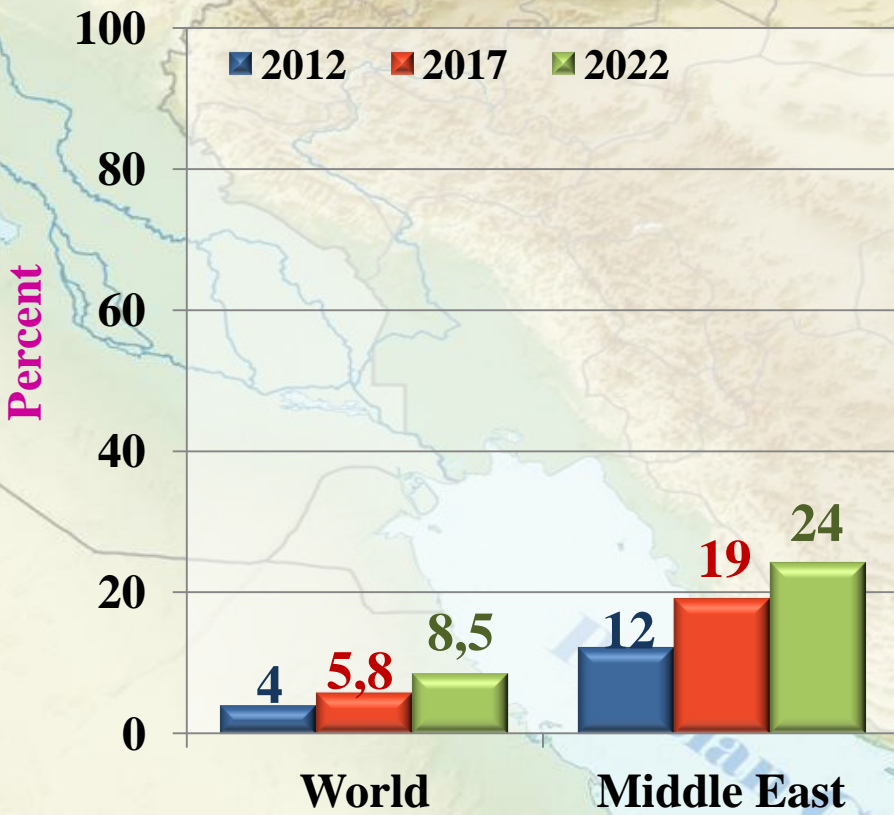




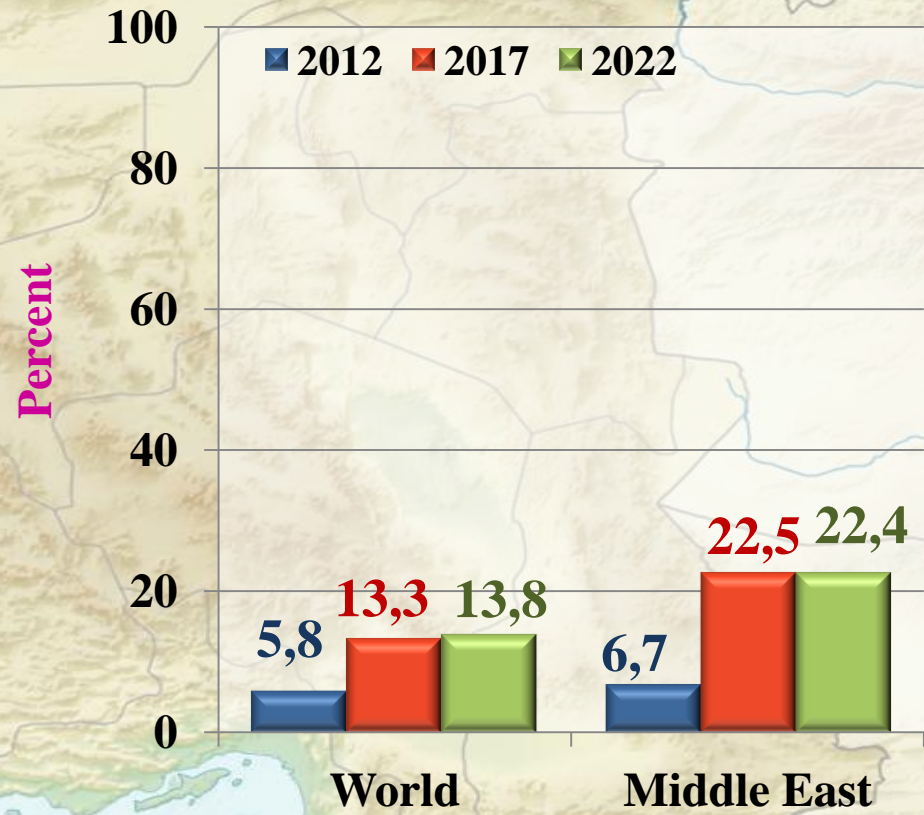
Iran's Share of the World and Mid East

Ethylene Glycol Capacity & Trade

Capacity

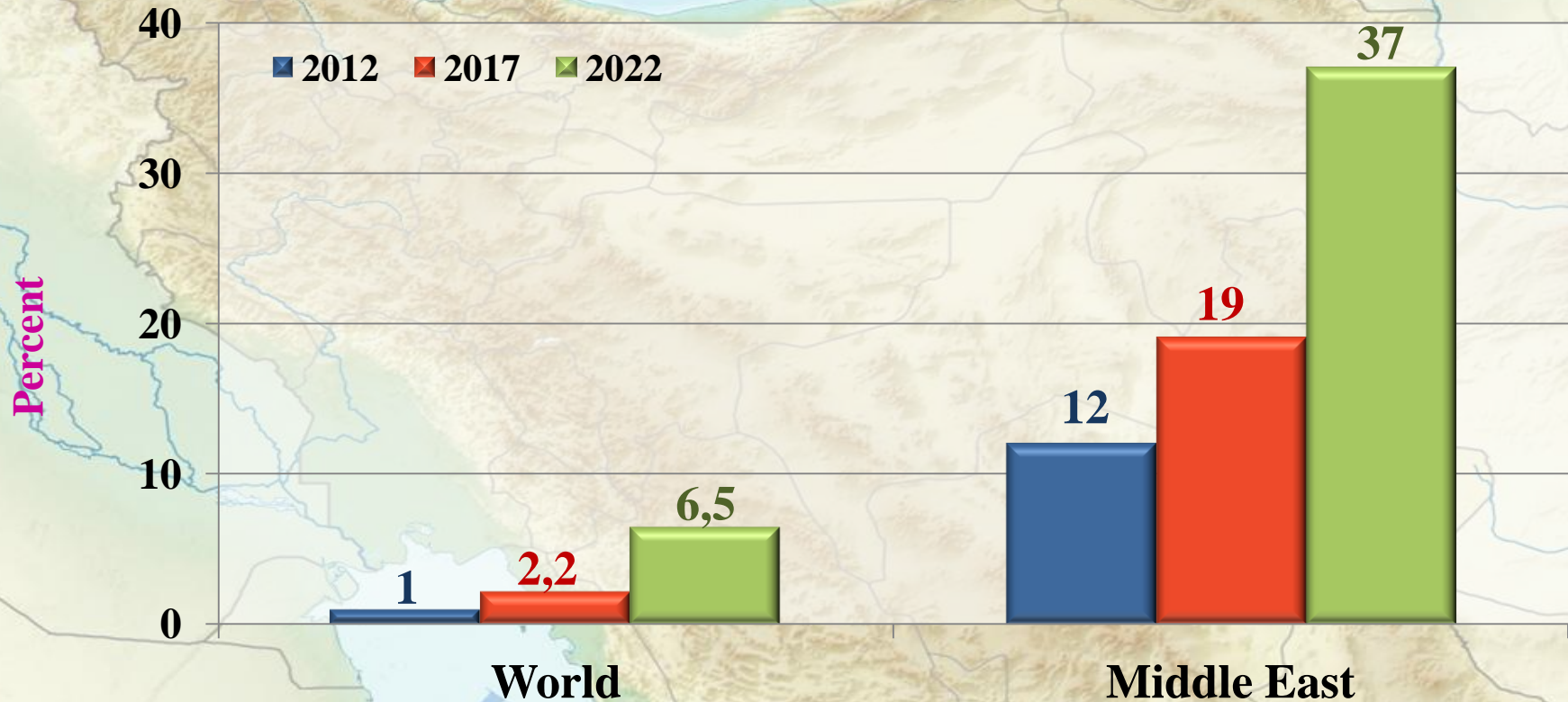


Trade





Iran's Share of the World and Mid East Propylene Capacity

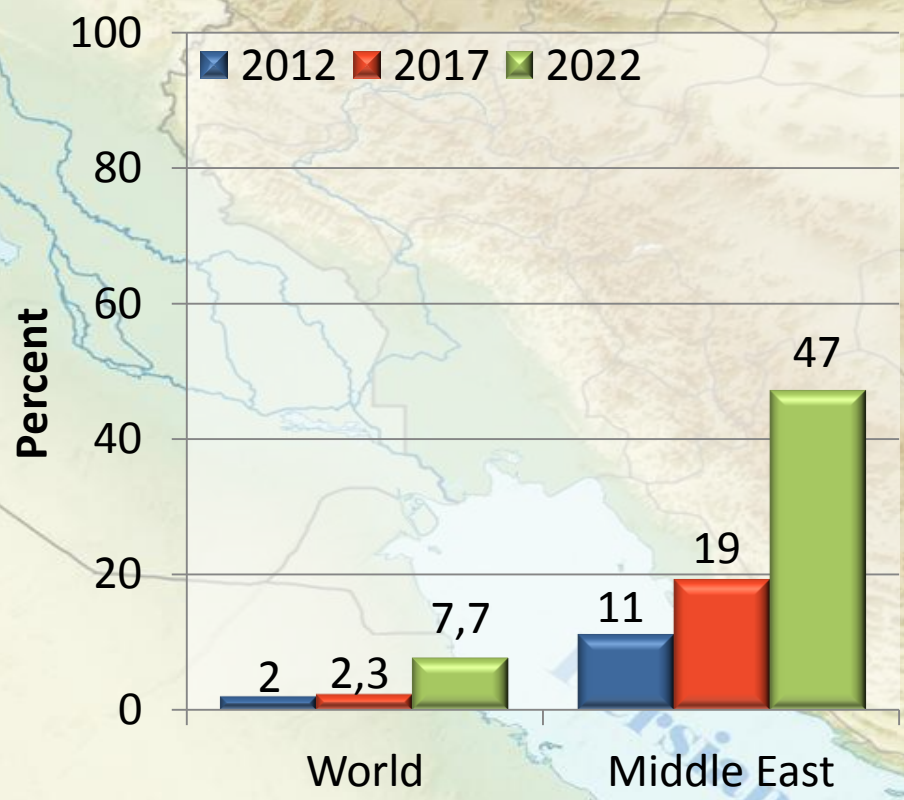


International trade of propylene monomer is quite limited because of the costs of transporting highly pressurized or refrigerated liquids. Most of the propylene trade crossing international borders is in the form of derivative chemicals, such as polypropylene and acrylonitrile.

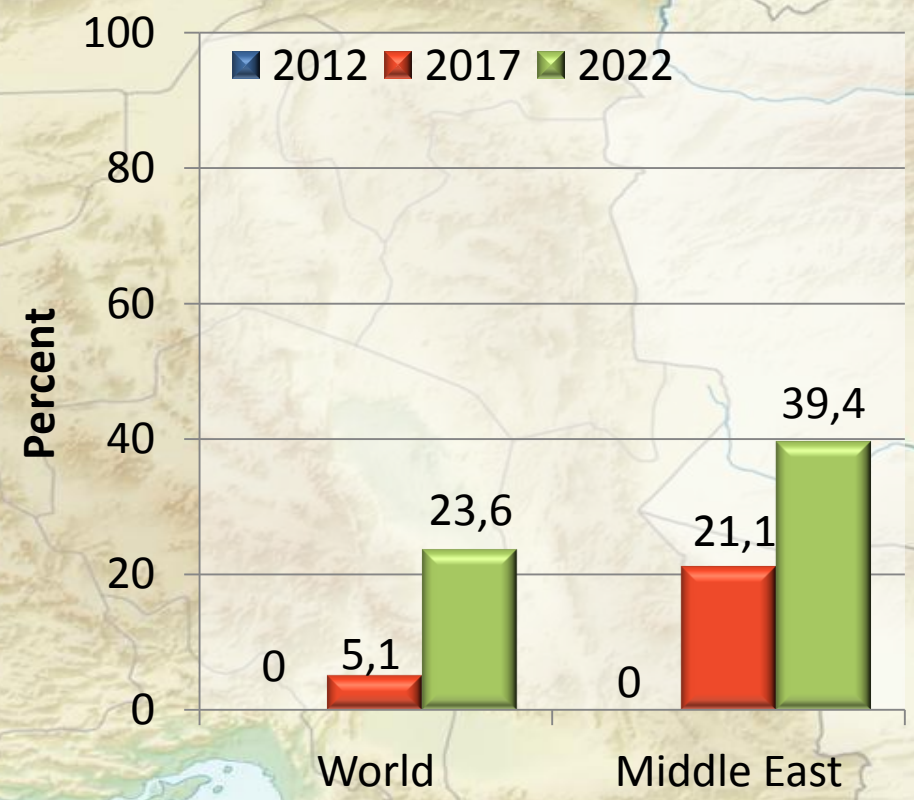


Iran's Share of the World and Mid East Polypropylene Capacity & Trade

Capacity



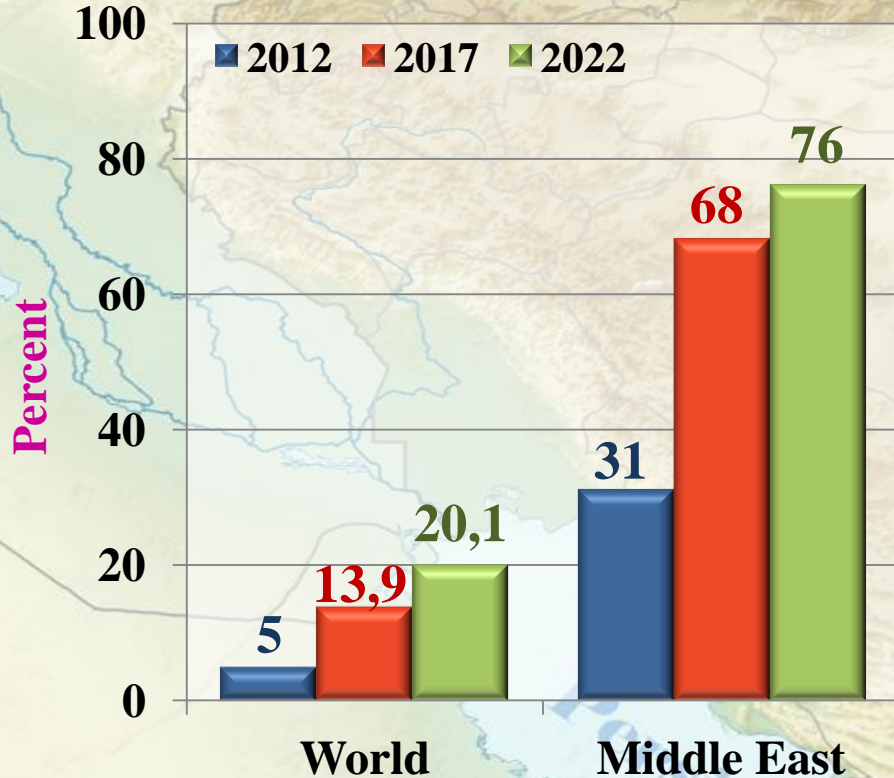
Trade



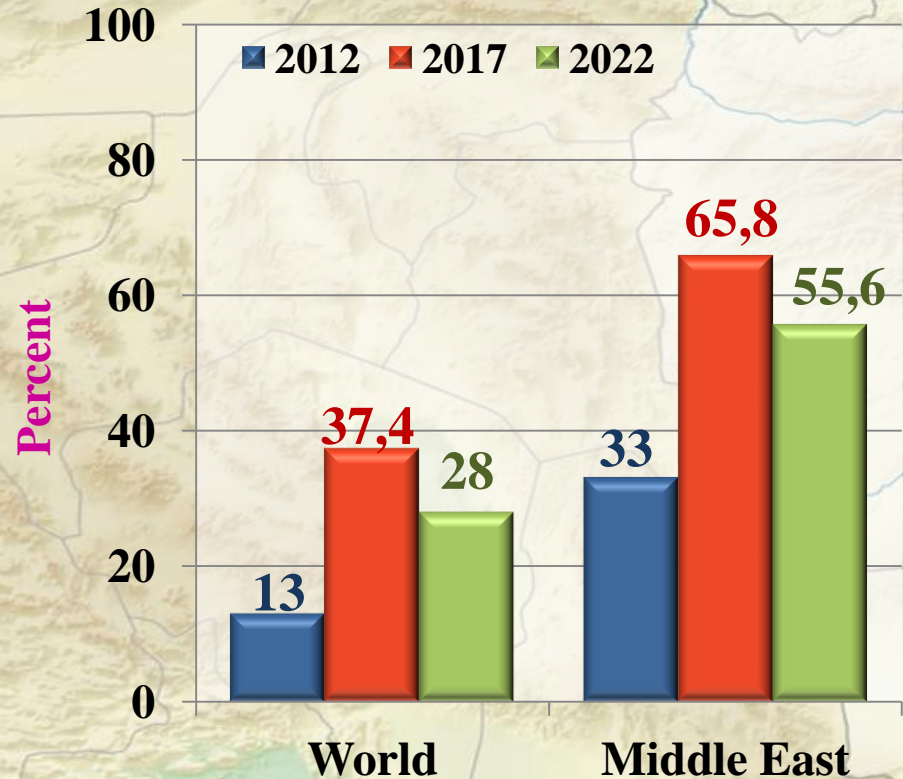


Iran's Share of the World and Mid East Methanol Capacity & Trade

Capacity



Trade

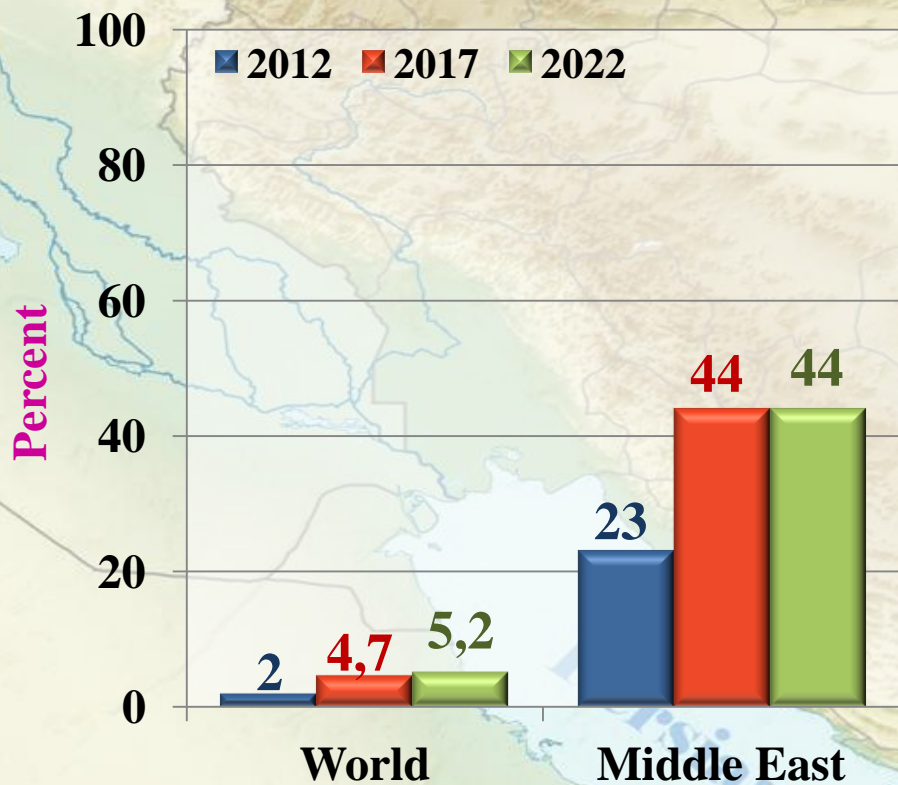


- ❖ Iran has the potential to take about 50% of global trade in 2017.
- ❖ Most of methanol capacities in future projects, will be used to produce olefins through new technologies (MTO and MTP).

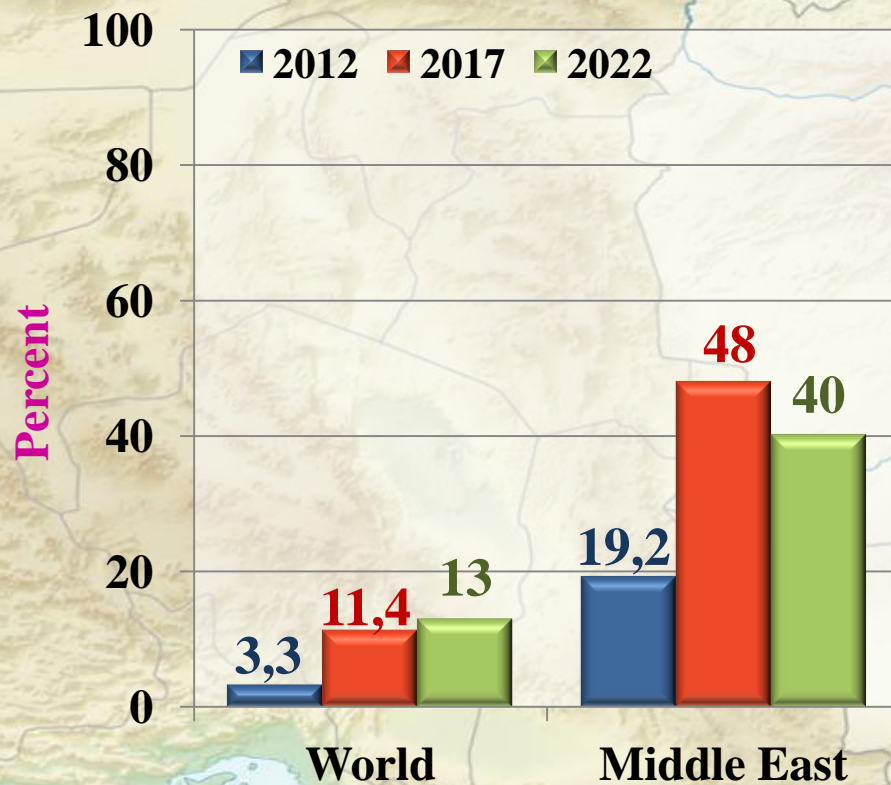
Iran's Share of the World and Mid. East Ammonia Capacity & Trade



Capacity



Trade



**THANK
YOU**

