



CENTRO SUPERIOR DE ESTUDIOS
DE LA DEFENSA NACIONAL
Instituto Español de Estudios Estratégicos

ieee.es

La geopolítica global de la energía

Coronel José Pardo de Santayana y Gómez de Olea

NATIONAL SECURITY STRATEGY

of the United States of America

DECEMBER 2017



“China y Rusia desafían el poder, la influencia y los intereses estadounidenses, y tratan de erosionar la seguridad y la prosperidad de Estados Unidos”.

China y Rusia son **podere revisionistas** que quieren configurar un mundo antitético a los valores e intereses de los EEUU.

Por primera vez desde el 11S, la rivalidad entre grandes potencias, en vez del terrorismo global, es la primera prioridad de la Seguridad Nacional de EE. UU.

Multipolar



Bipolar



Hegemónico



¿Trampa de Tucídides?

¿Orden liberal?

Multipolar



Globalización

Mundo interconectado

Mundo no homogéneo

nacionalismo

ideologías

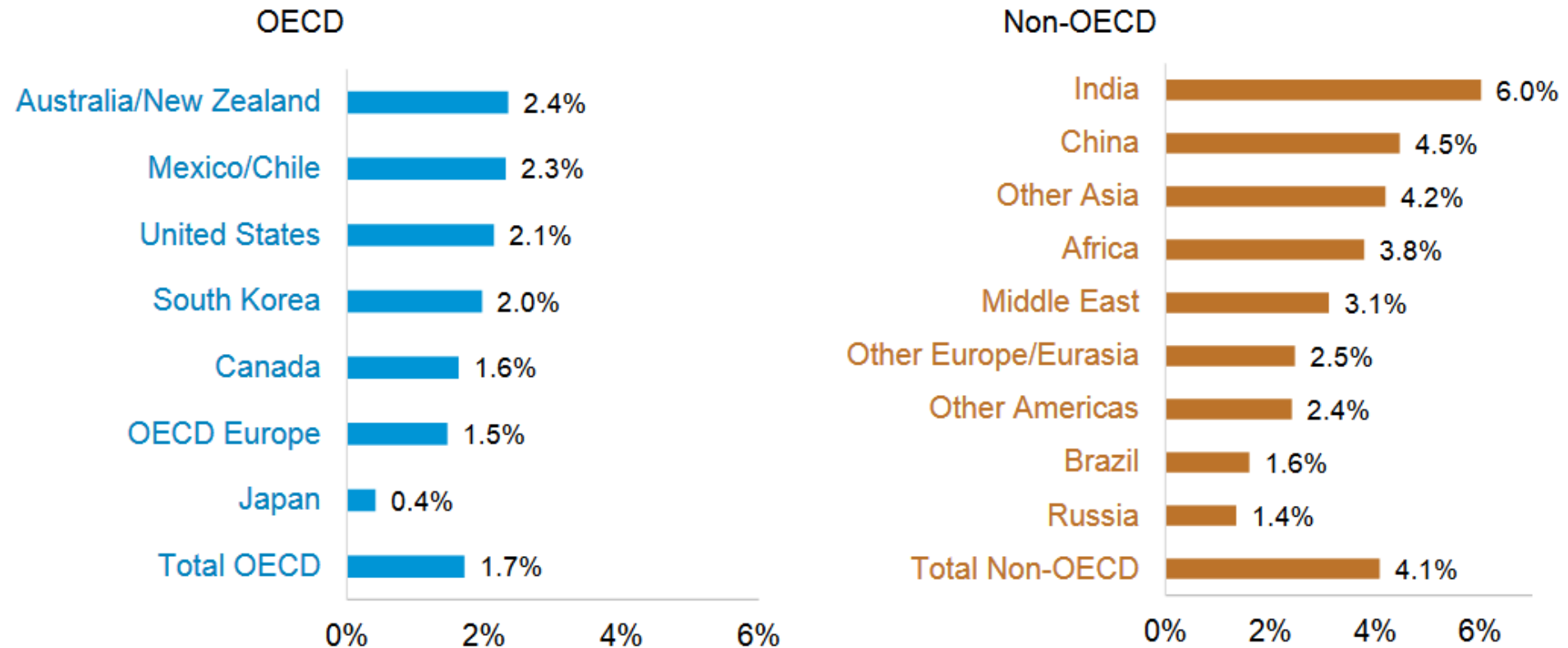
Orden liberal

nacionalismo



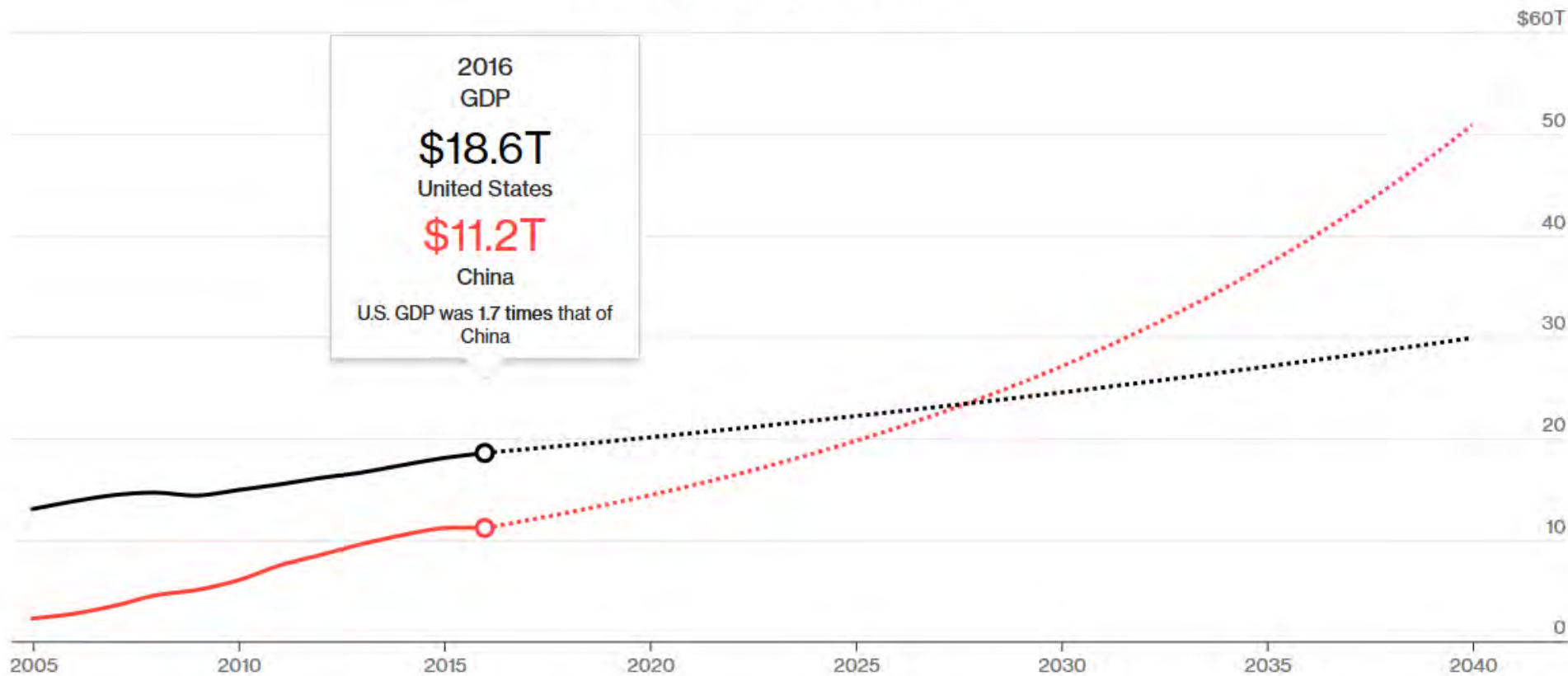
Shanghai 1980-2017

average annual percent change in real GDP by region, 2015–40



Source: EIA, *International Energy Outlook 2018*

China's GDP will overtake the U.S. level in 2028 at these projected average growth rates:

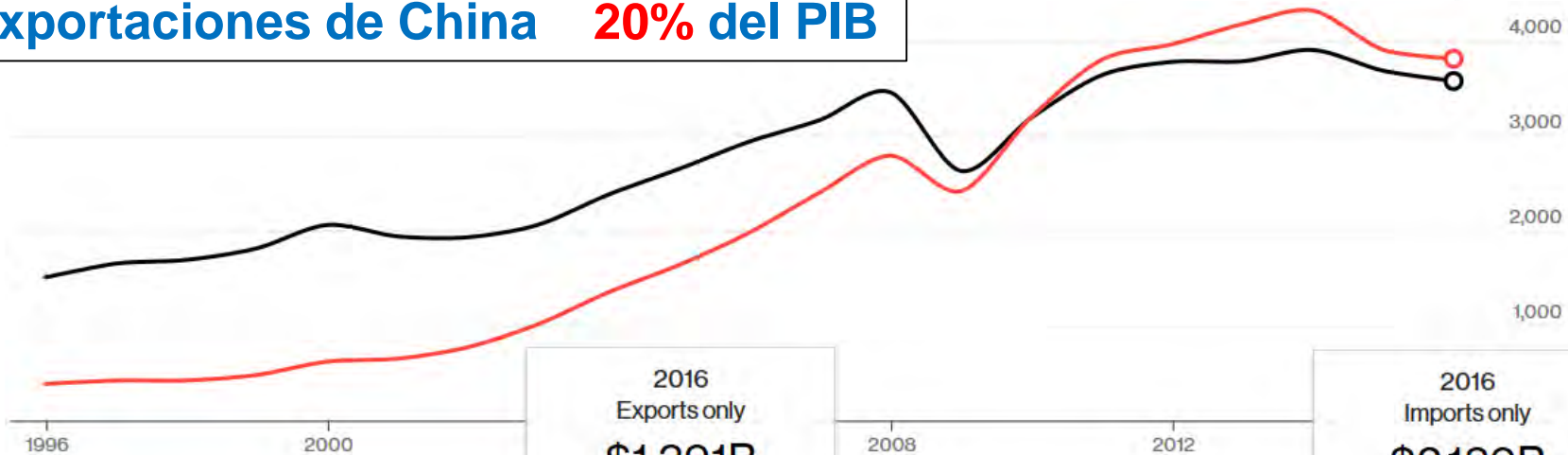


China is already the world's largest trading nation

China's exporting prowess has fueled massive trade surpluses and tensions with the U.S. While Donald Trump has so far failed to follow through on campaign threats to spark a trade war, tensions remain high with antidumping duties recently slapped on Chinese aluminum foil and the U.S. Commerce Department maintaining its view that China isn't a market economy.

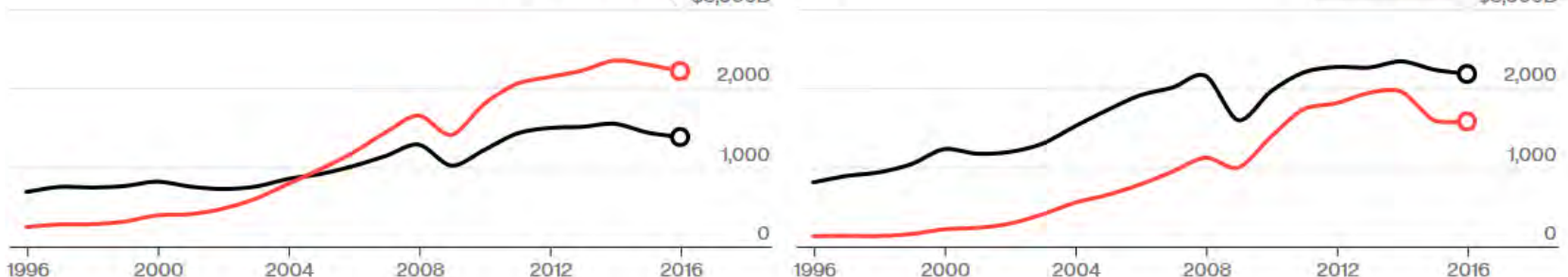
2016
World trade
\$3,580B
United States
\$3,815B
China
U.S. trade with the world was
0.9 times that of China

Exportaciones de EE.UU. 7,4% del PIB
Exportaciones de China 20% del PIB

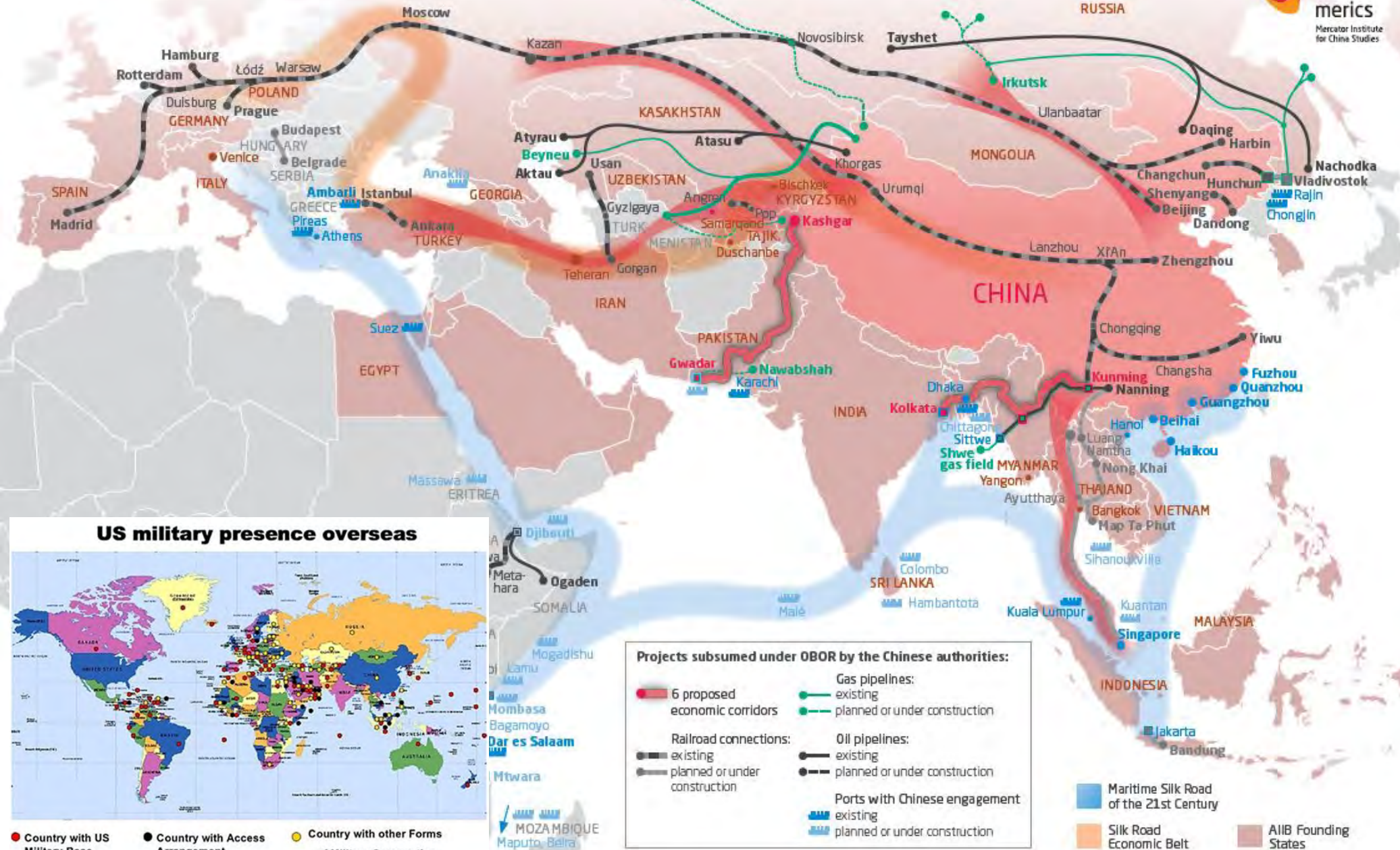


¿Libre mercado?

2016
Imports only
\$2,189B
United States
\$1,589B
China
U.S. total imports from the world
were 1.4 times that of China



Geoeconomía china

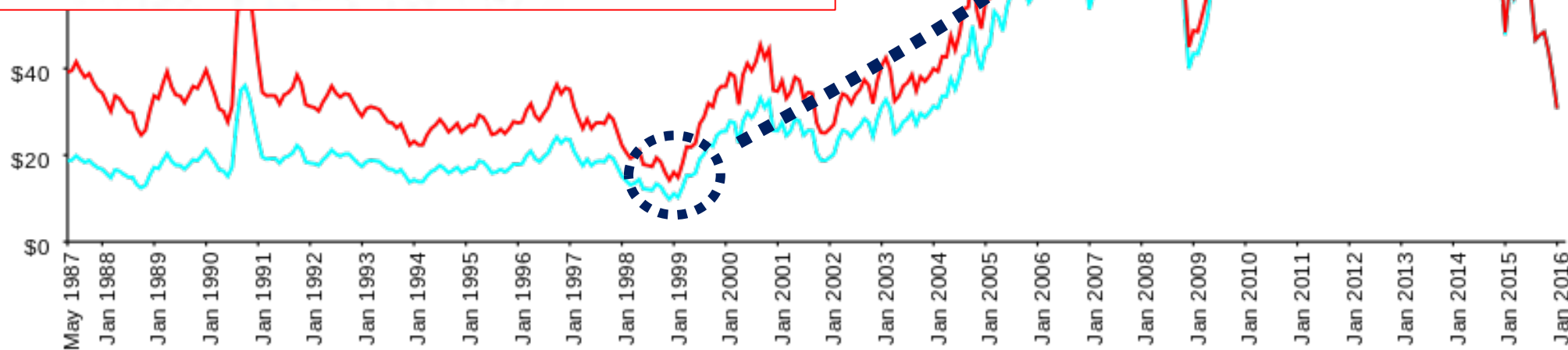
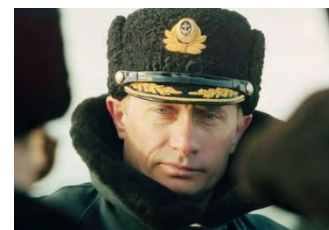
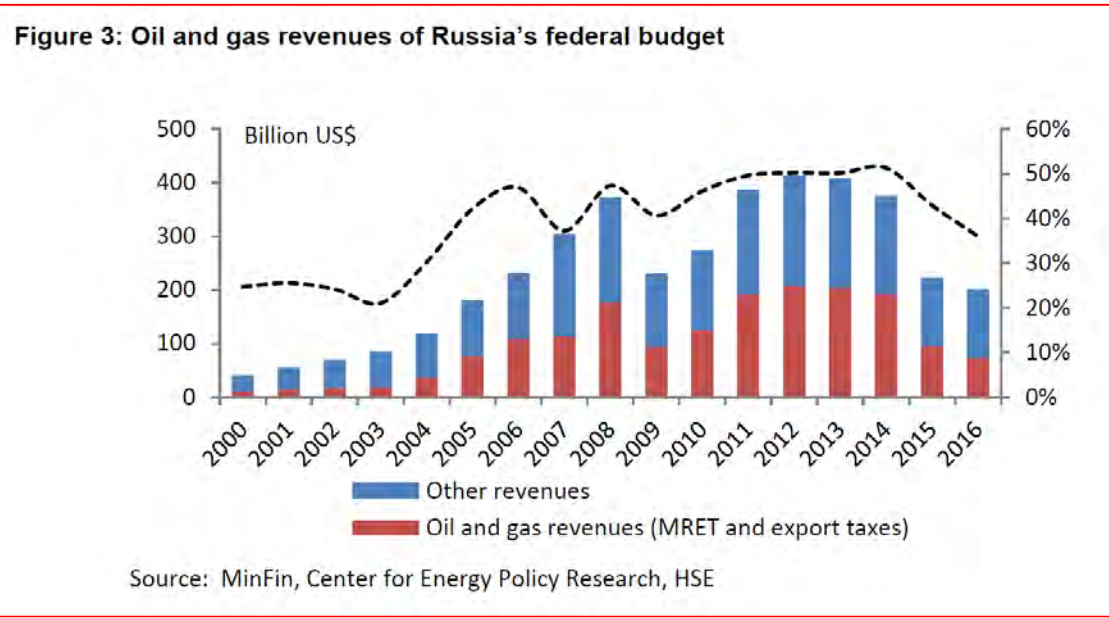


US military presence overseas



Djibouti
Meta-hara
Ogaden
SOMALIA
Mogadishu
Kamu
Mombasa
Bagamoyo
Dar es Salaam
Mtwara
MOZAMBIQUE
Maputo, Beira

El ascenso de la Federación Rusa



El ascenso de la Federación Rusa



OCEAN PACIFIQUE

OCEAN GLACIAL
ARCTIQUE

2008 ¡Giro a Asia!

2014 ¡perfil de guerra fría!

¡Primavera Árabe!

• Moscú

OCEAN
ATLANTIQUE

Entente ruso-saudí





Crisis interna de Occidente

Revisionismo geopolítico chino y ruso

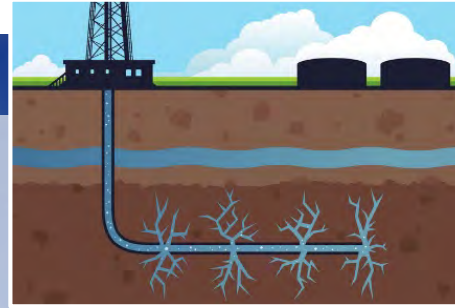
Nuevas dimensiones de confrontación

Rebeldía frente al orden liberal

¡Cambio climático!



-Fracking+GNL



-Almacenamiento de electricidad

-Solar y eólica

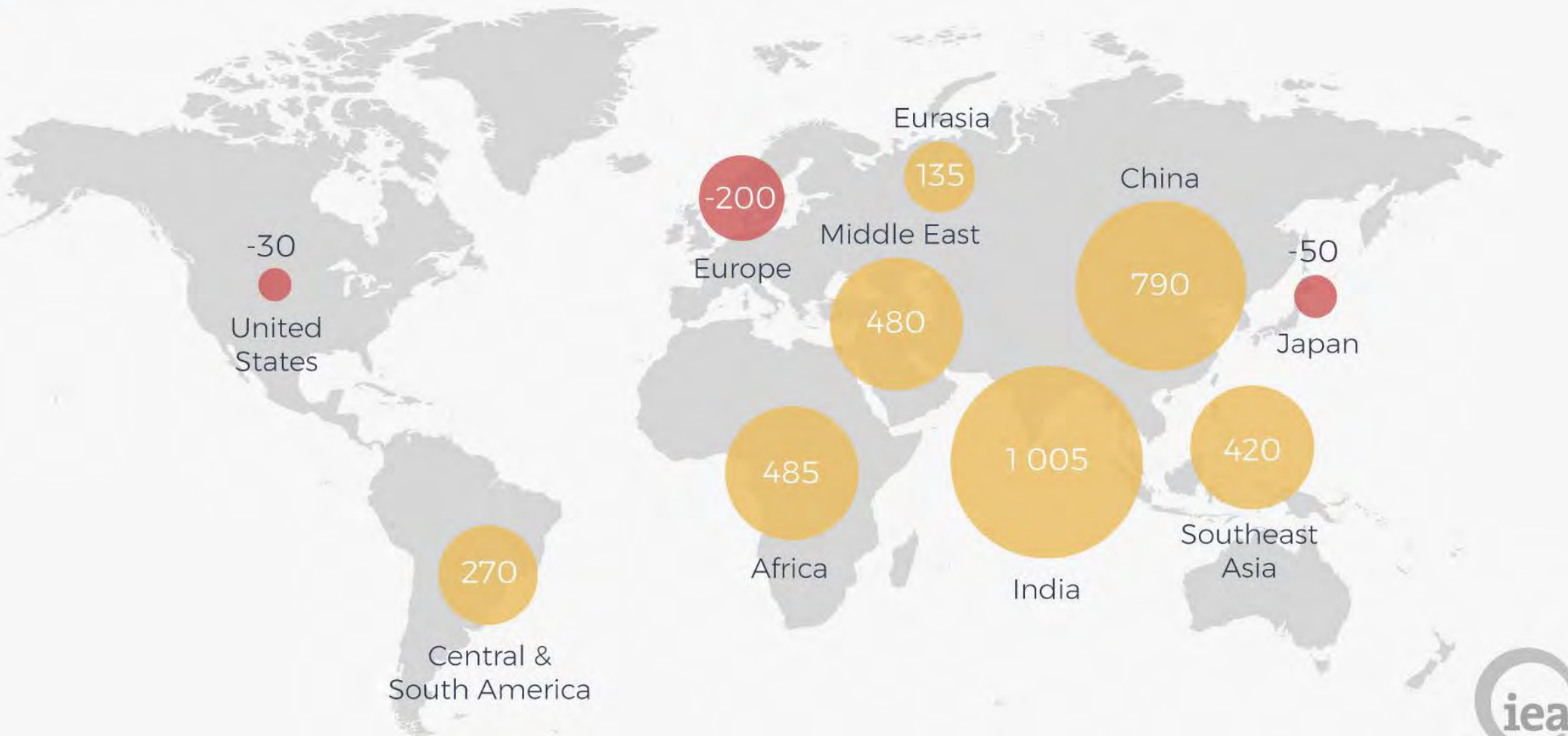
-Eficiencia energética

-Captación de CO2

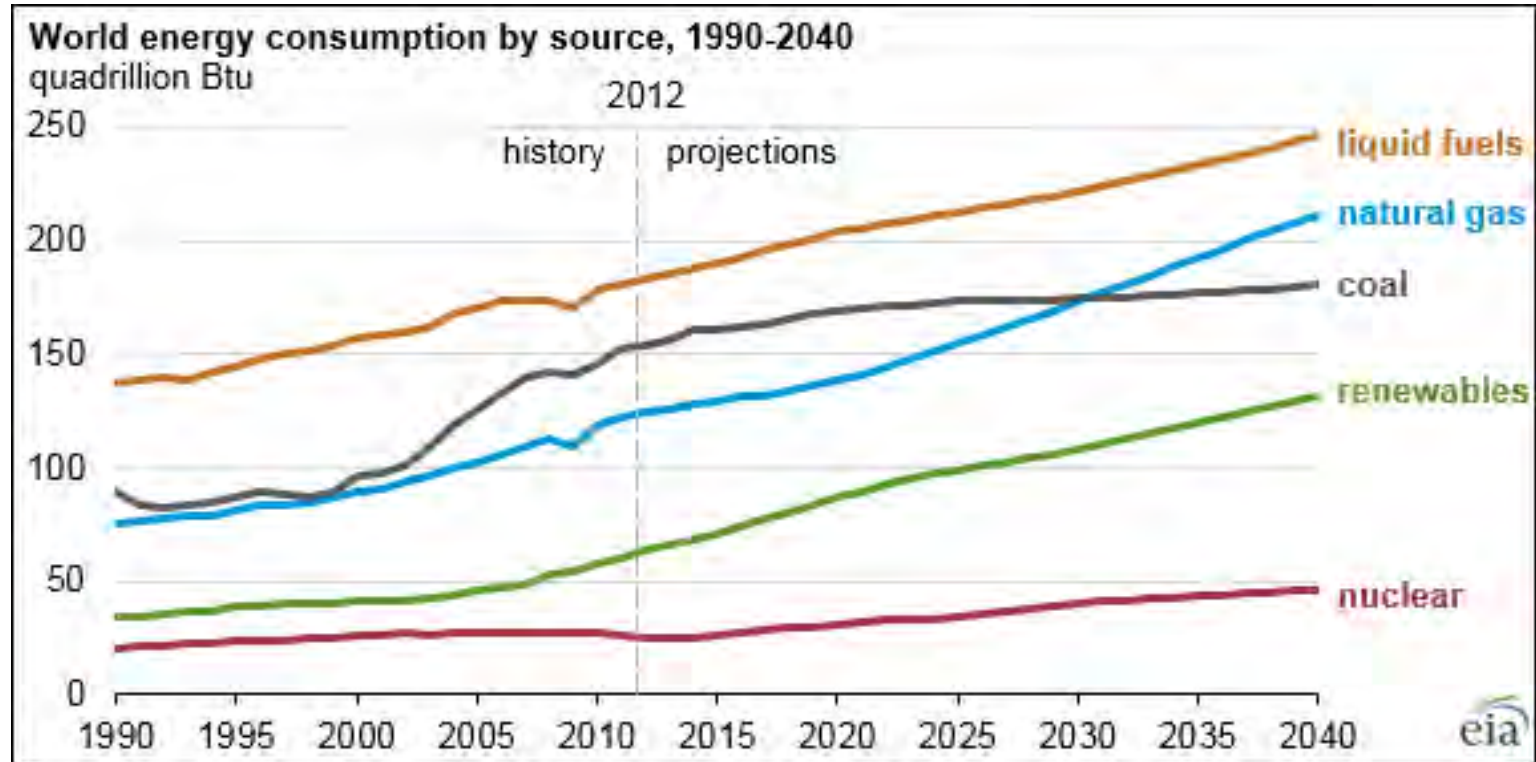


Change in primary energy demand, 2016-40 (Mtoe)

World Energy Outlook 2017



Fuentes de energía



Recurso estratégico

sensible a conflictividad regional y global
imprescindible en:

industria química
transporte marítimo
transporte aéreo
vehículos pesados



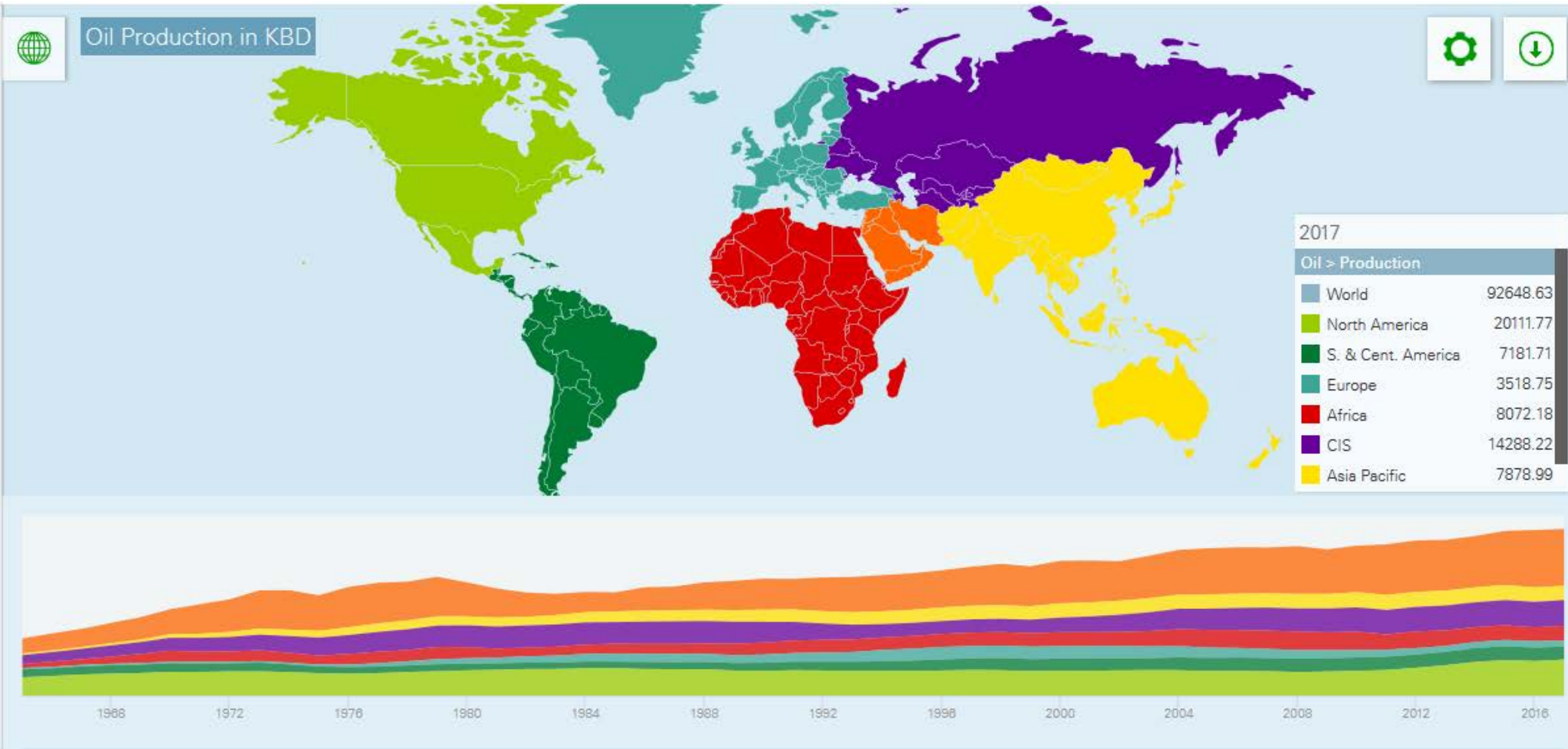
Reserva de petróleo (Millardo - Barriles)



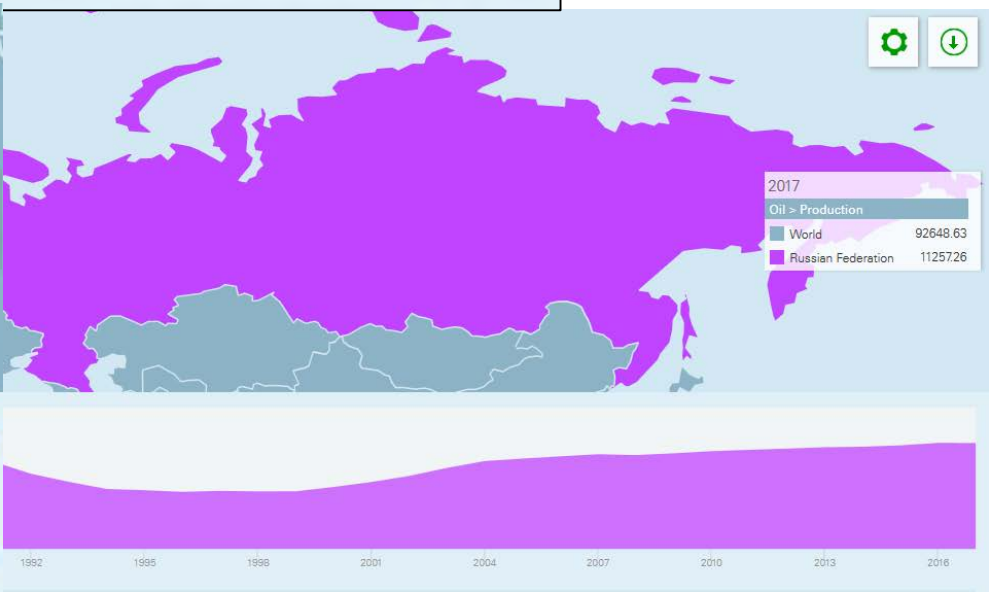
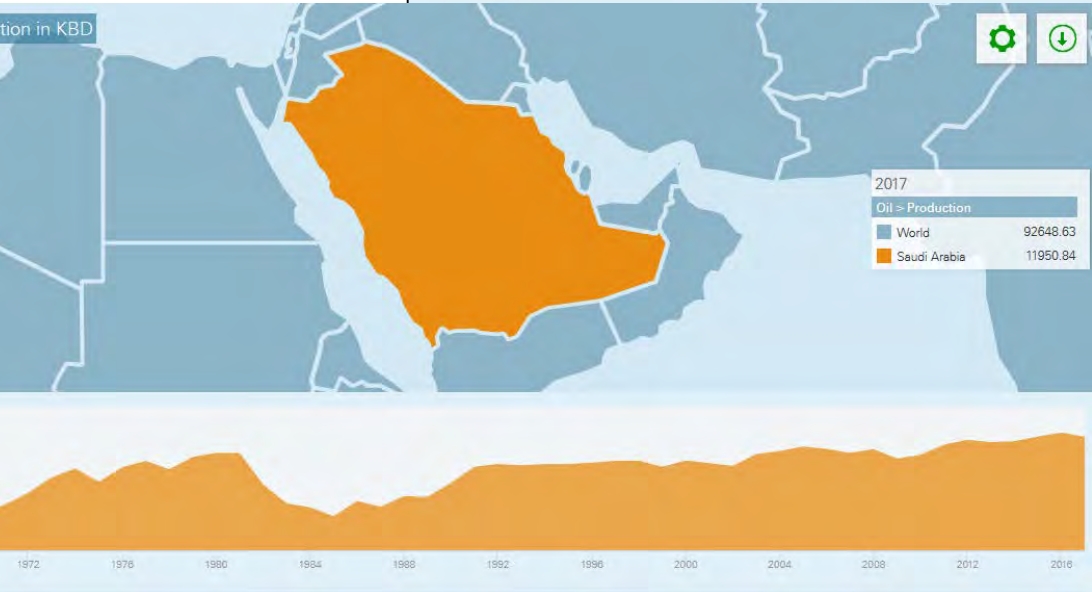
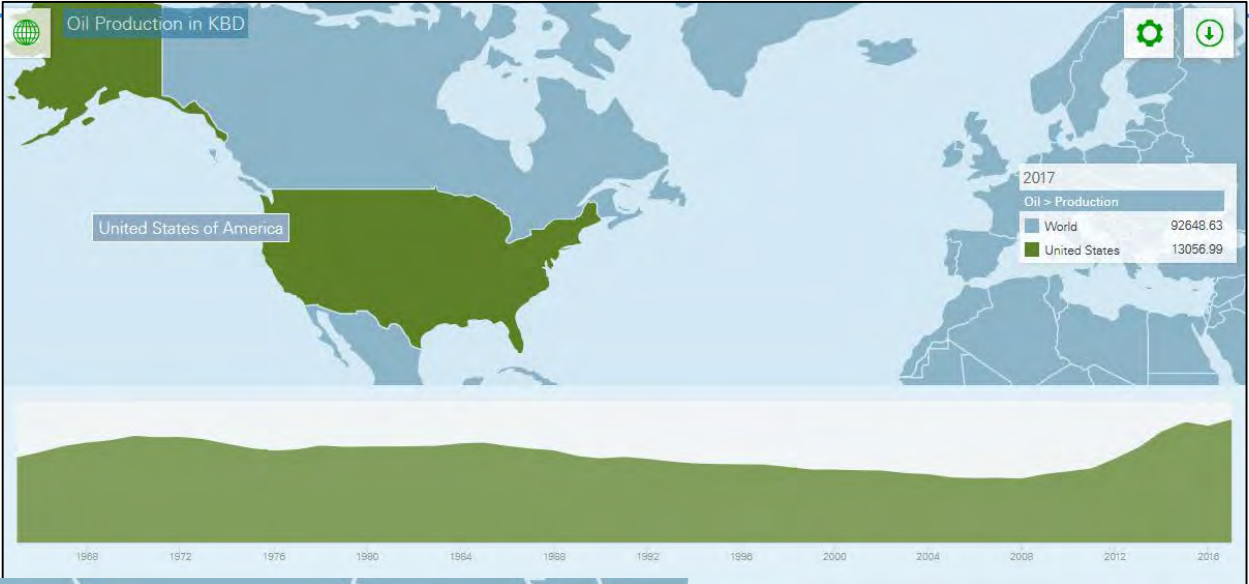
Fuente : EIA - 2015

Copyright © Actualitix.com All rights reserved

Producción de petróleo



Producción de petróleo

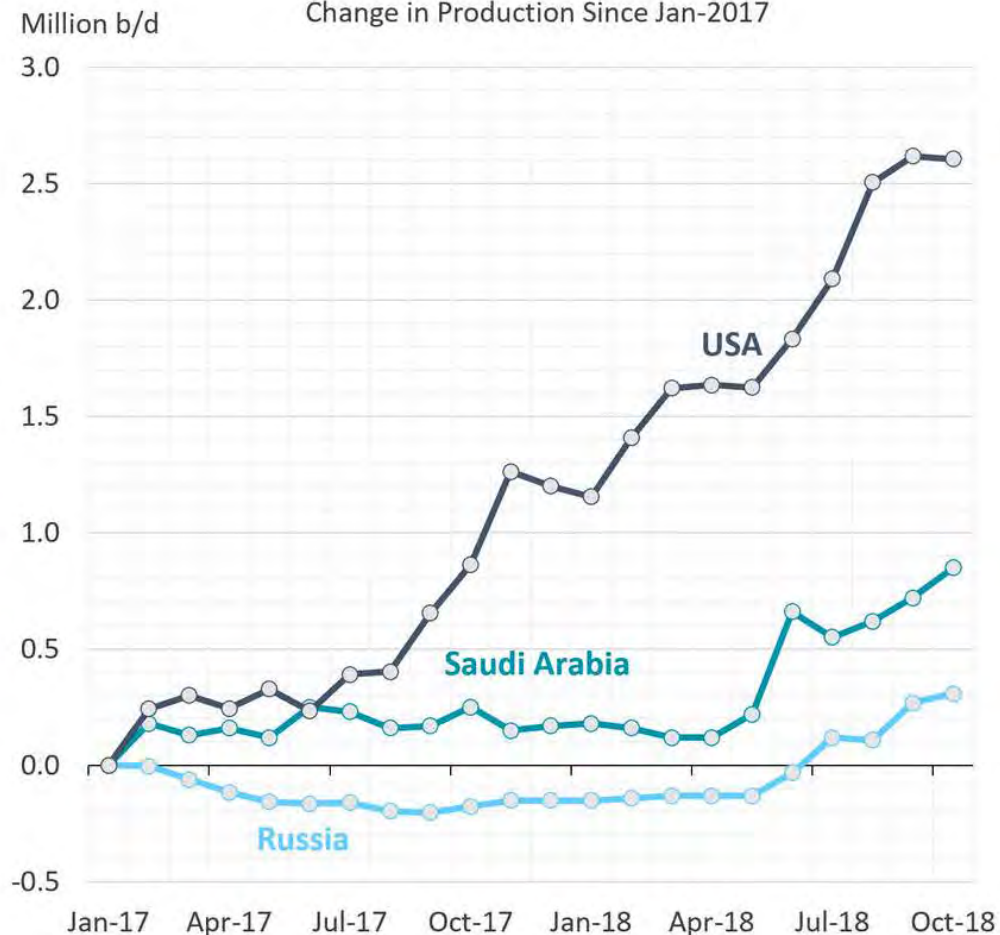


The surge in global supply has helped to erase 2018 crude oil price gains

Brent and WTI Spot Price FOB



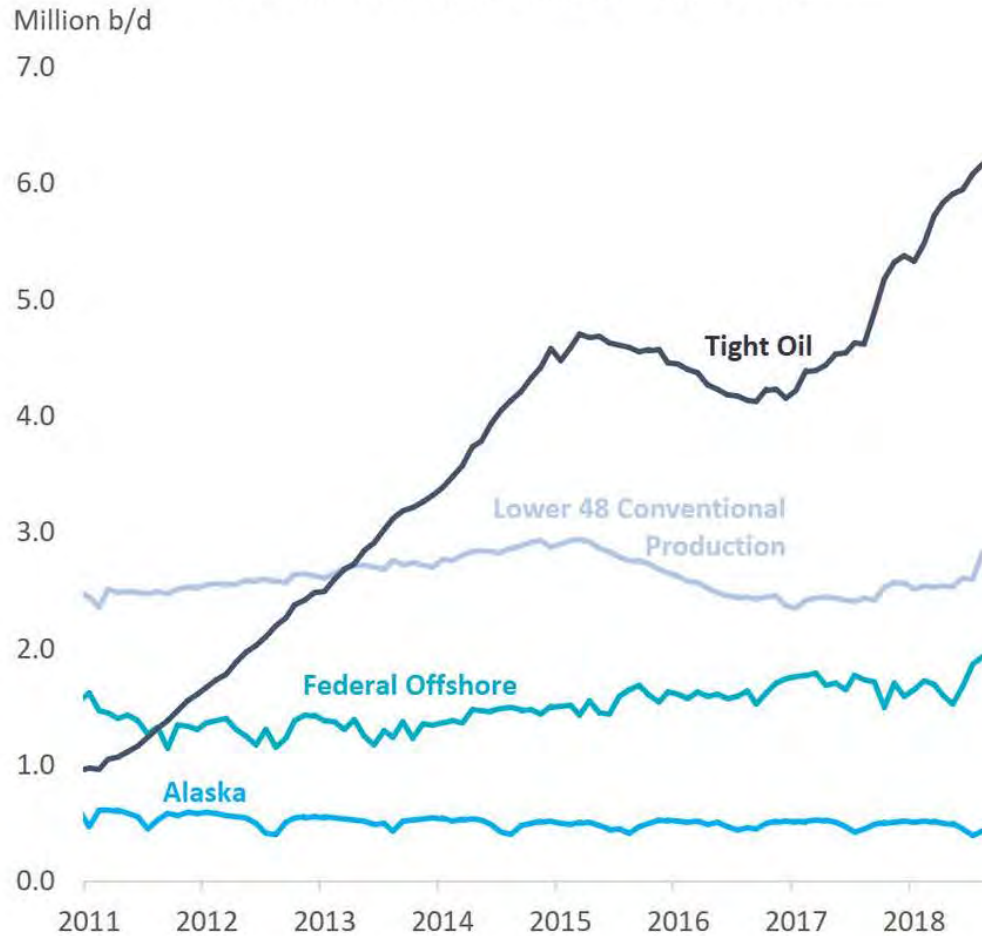
The Titanic Three Change in Production Since Jan-2017



Source: CSIS using EIA and IEA data. USA & Saudi Arabia figures include crude oil only, Russia figures include crude oil and NGLs.

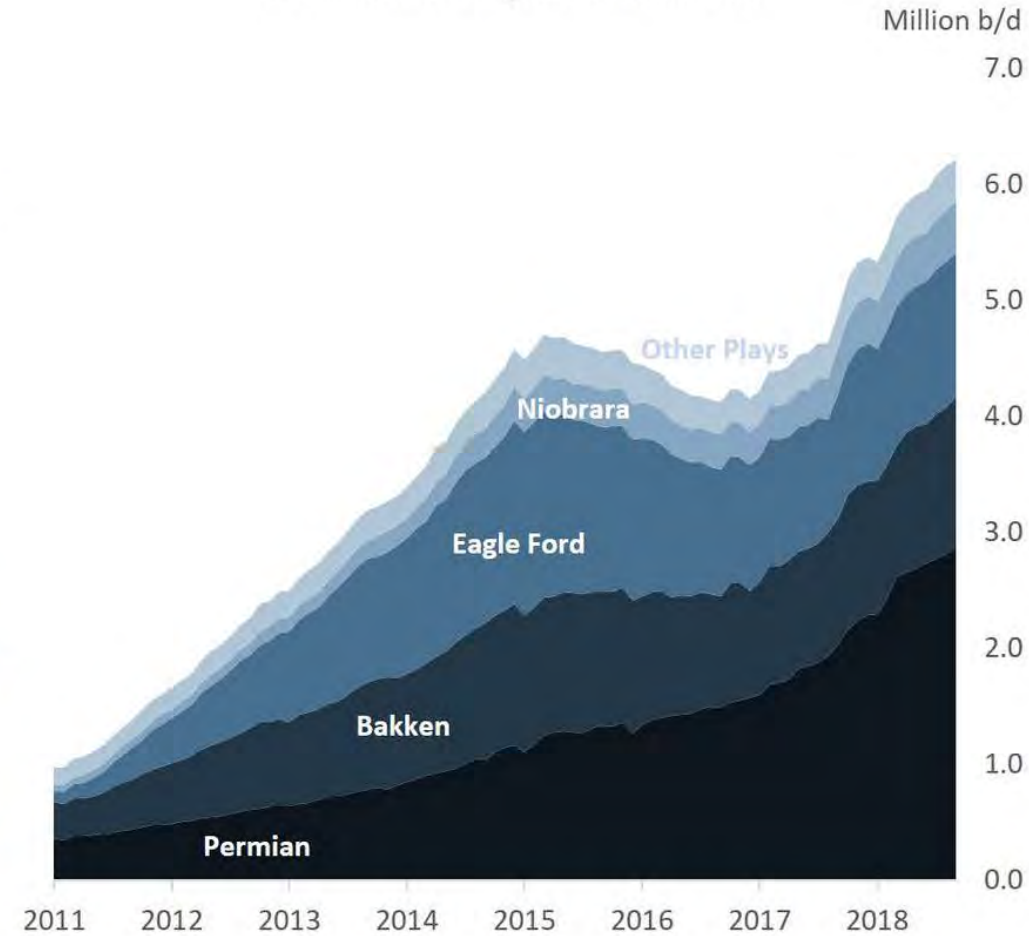
The vast majority of U.S. production gains have come from tight oil resources

Breakdown of U.S. Crude Oil Production



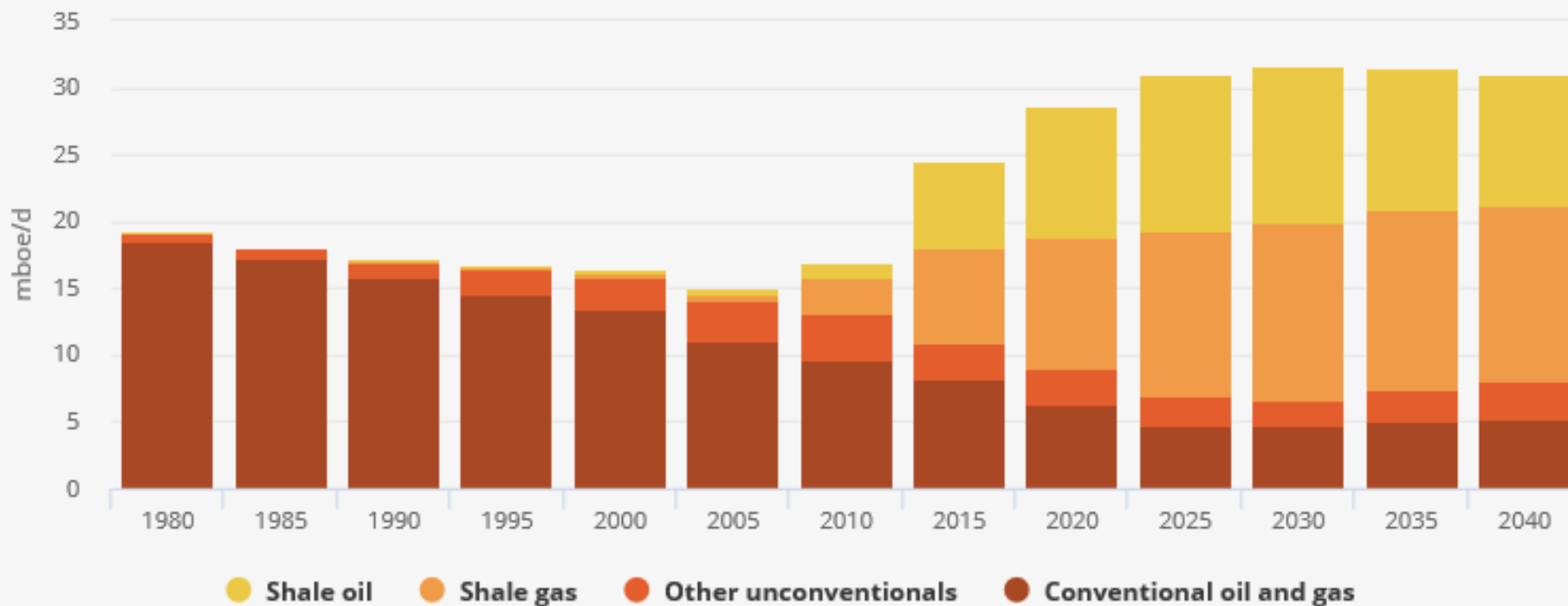
Source: CSIS using EIA data

Breakdown of Tight Oil Production



Oil and gas production in the United States

New Policies Scenario, 1980 - 2040

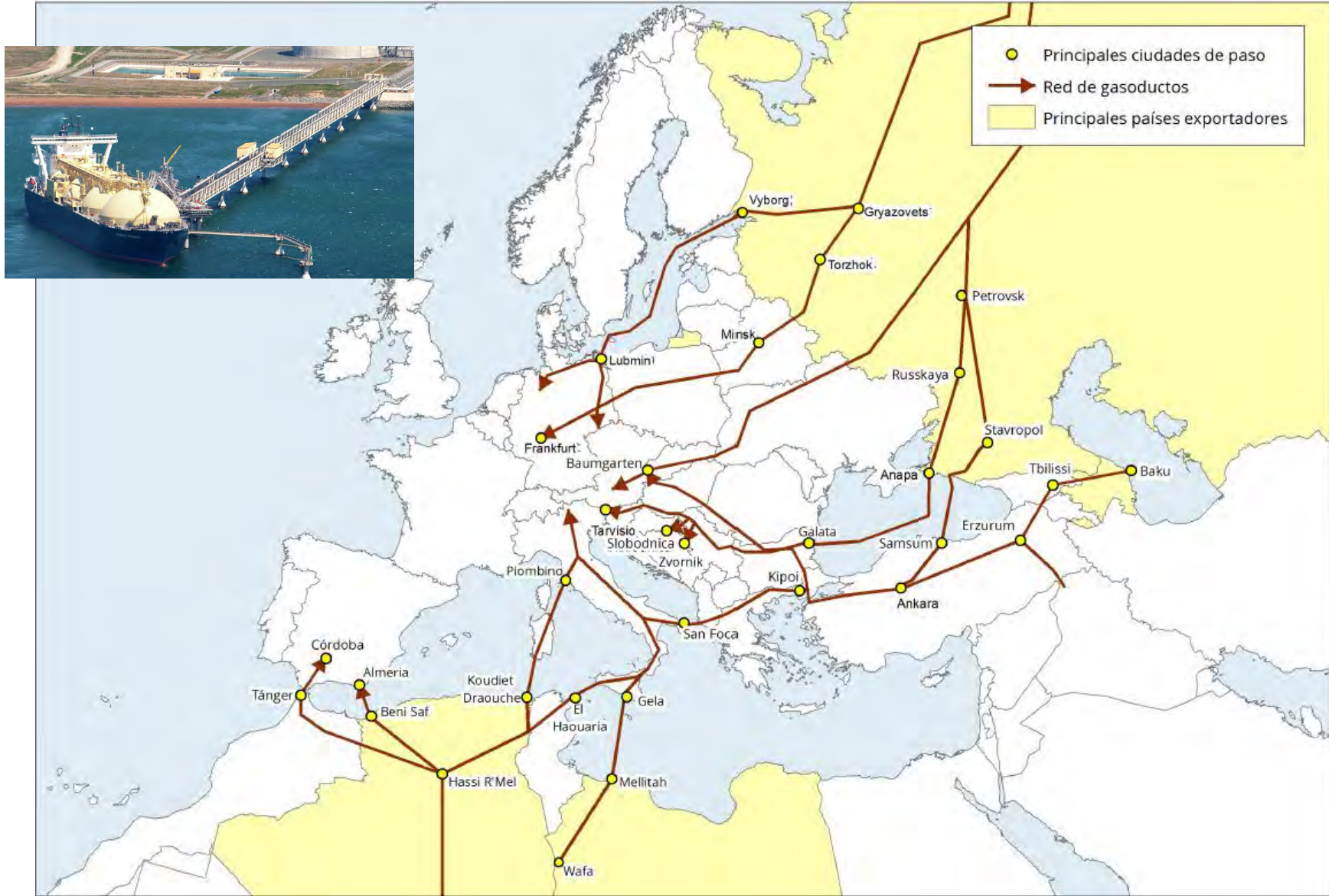


World Energy Outlook 2017. IEA

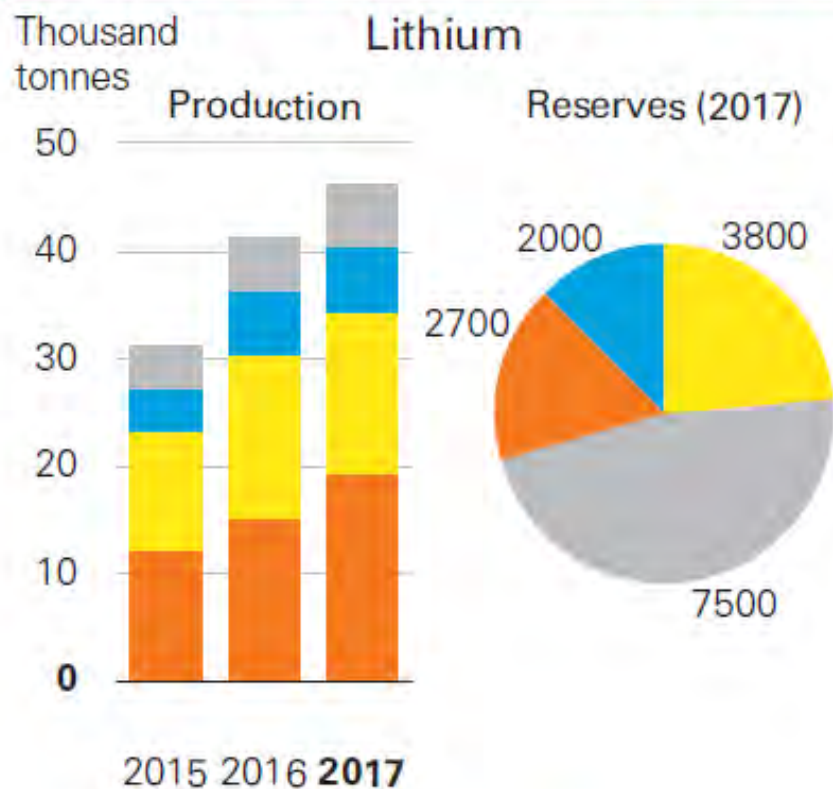
Pacto con Irán



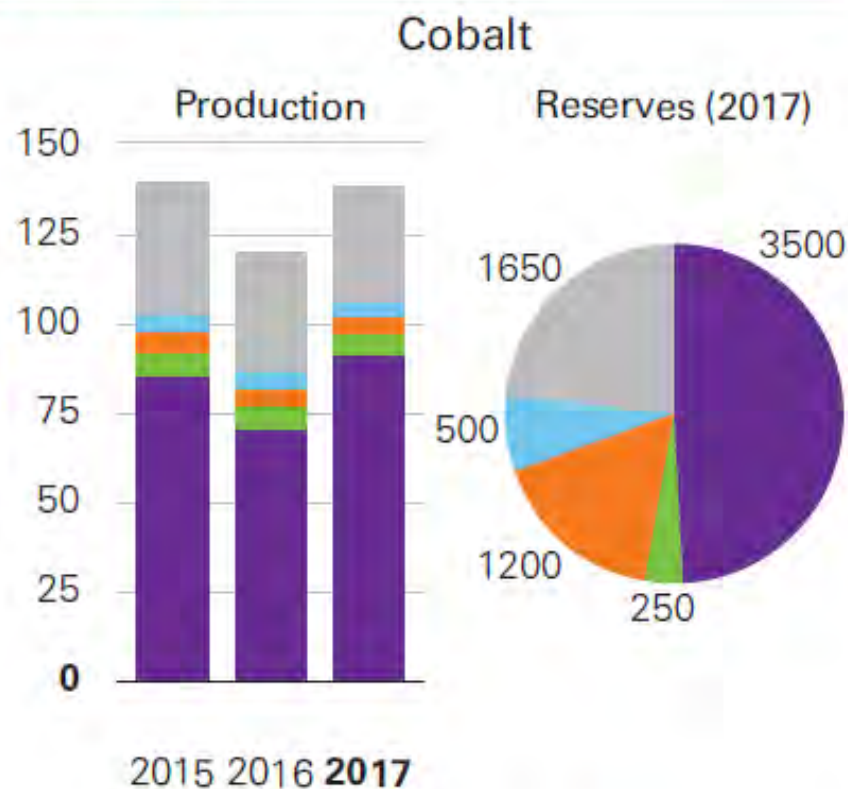
GNL-gasoductos



Lithium and cobalt: reserves and production



● Australia
 ● Chile
 ● Argentina
● Other



● DR Congo
 ● Canada
 ● Australia
● Cuba
 ● Other

-
- Mix eléctrico liderado por las renovables
 - ¿Respaldo del gas natural?
 - Capacidad de almacenamiento
 - Revolución en la distribución
 - Autoconsumo
 - China y Rusia, energía nuclear



www.defensa.gob.es/ceseden/destacados/publicaciones/index.html

www.ieeee.es/documentos/

<http://publicaciones.defensa.gob.es/>

Página Web: <http://www.ieeee.es/>

RR. SS. :