



ARAR PETROL ve GAZ Arama Üretim Pazarlama A.Ş.

9ncu TÜRKİYE ENERJİ ZİRVESİ

9-10 Ekim 2018

ANTALYA

ARAR PETROL ve GAZ ARAMA ÜRETİM PAZARLAMA AŞ.



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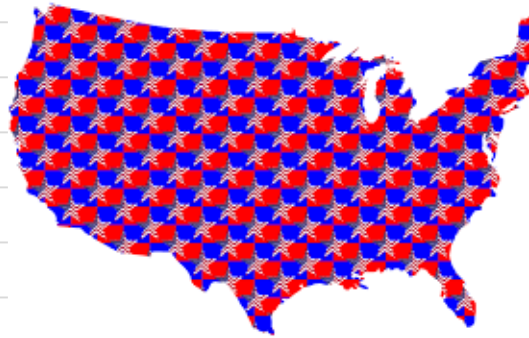
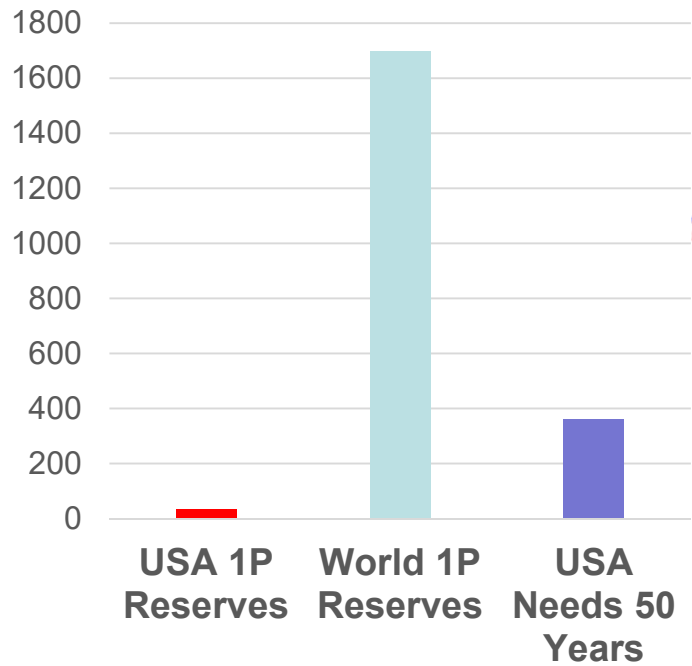
PETROL: RİSK VE DAYANILMAZ CAZİBE



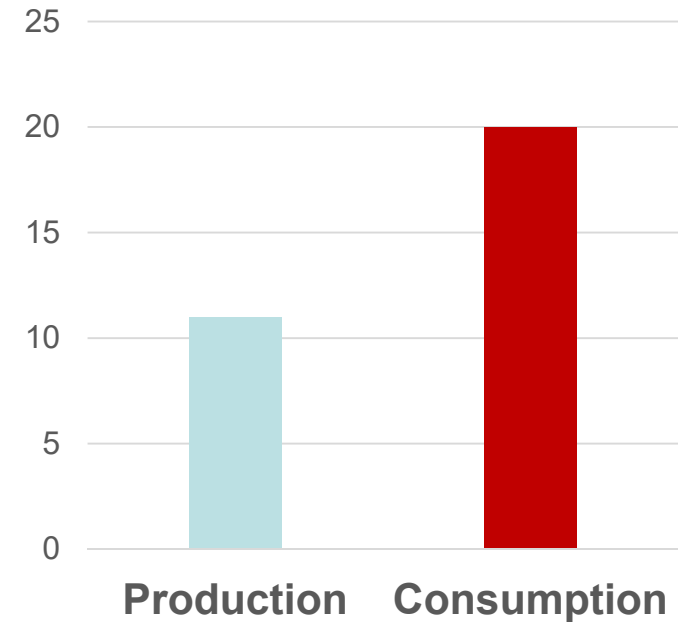


ABD ve PETROL FİYATI

1P Petrol Rezervi (in Bn bbl)



ABD Günlük Rakamlar (MMbopd)



- USA 1P reserves only ~5 years USA consumption - ABD P1 rezervleri kendisi için sadece 5 yıl yeterli
- Global reserves ~50 years global consumption – Global rezevler ise dünya tüketimi için sadece 50 yıl yeterli



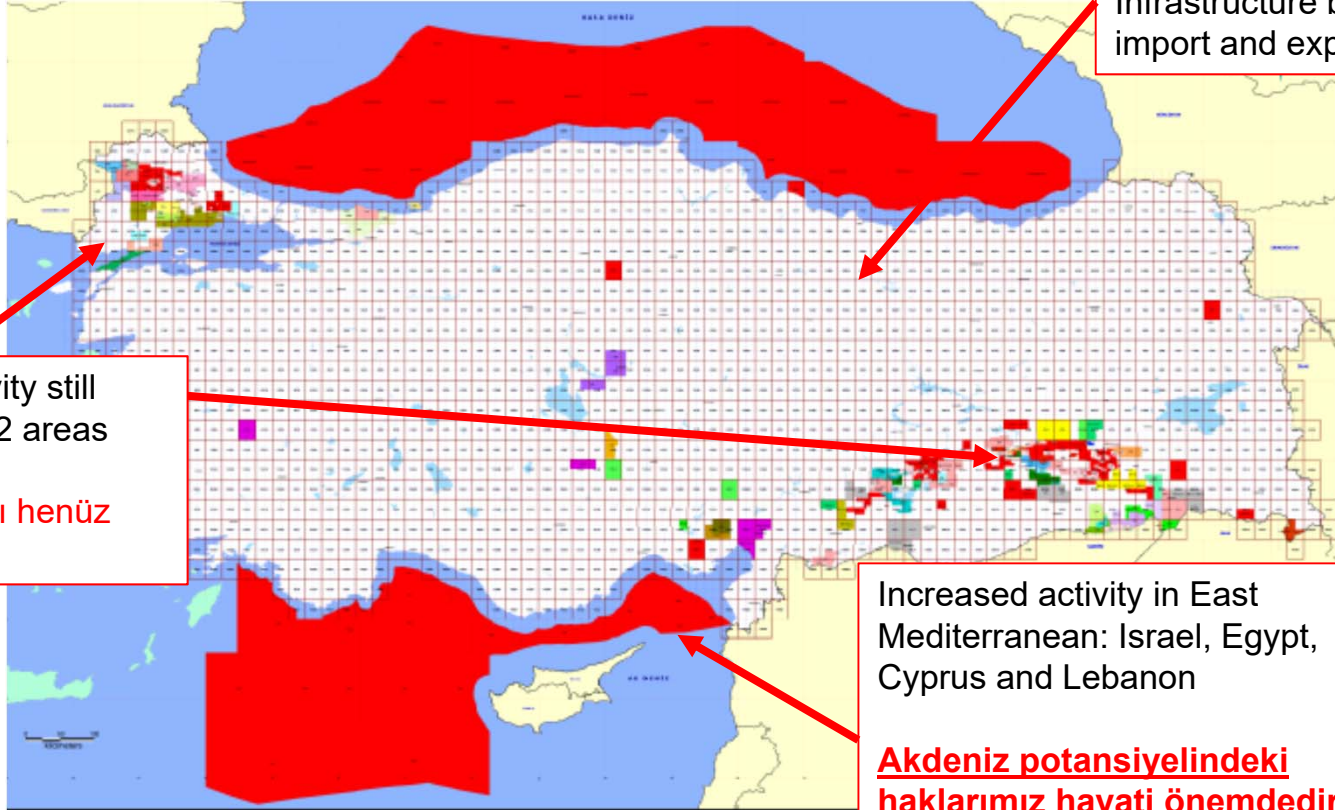
TÜRKİYE - PETROL POTANSİYELİ

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Expanding Pipeline
Infrastructure bolstering
import and export capacity

Turkish E&P activity still
predominantly in 2 areas

**Türkiyenin 90% nı henüz
aranmamış**

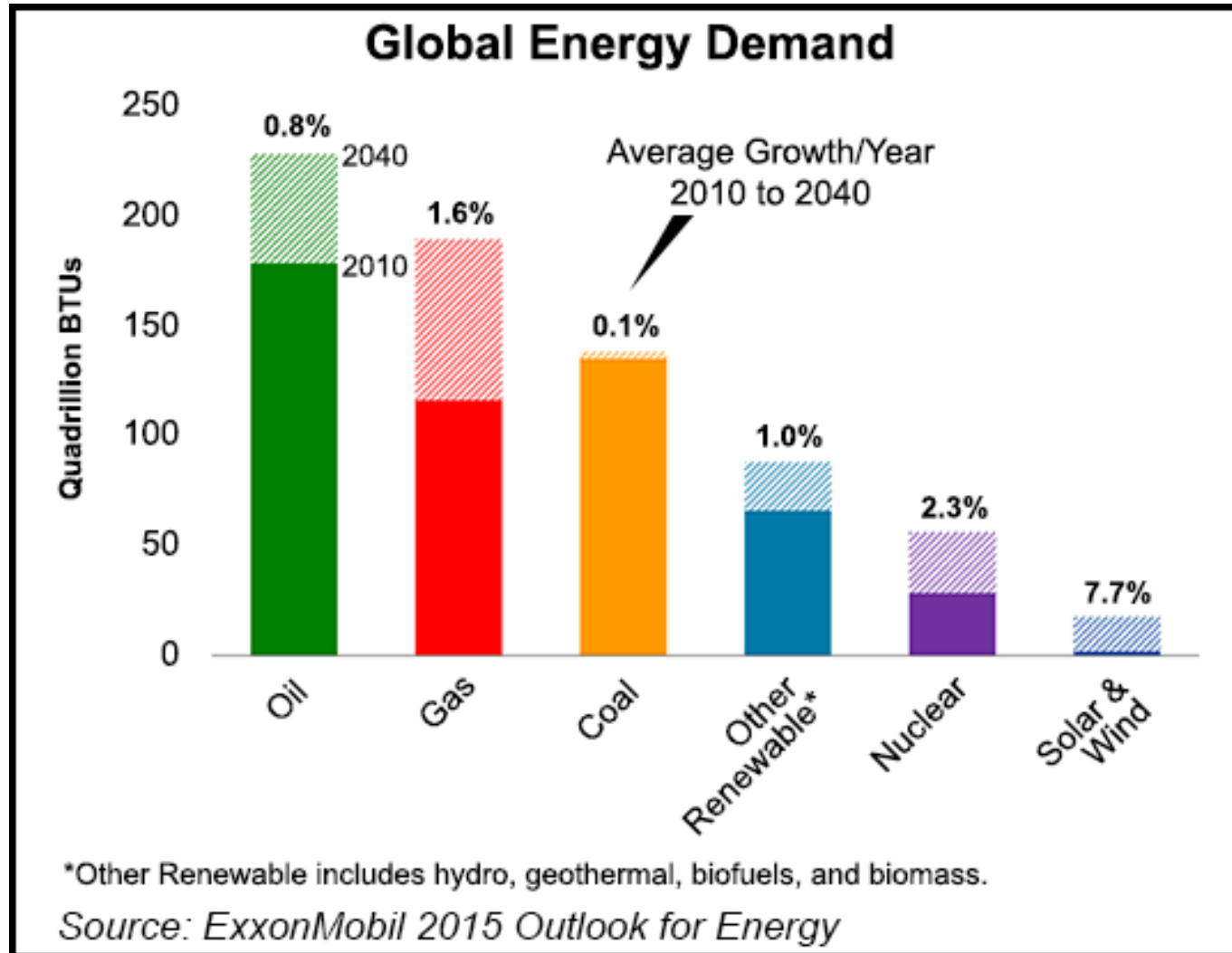


Increased activity in East
Mediterranean: Israel, Egypt,
Cyprus and Lebanon

**Akdeniz potansiyelindeki
haklarımız hayati önemdedir !!!
ödün vermeden ısrarla sahip
çıkmalıyız !!!**



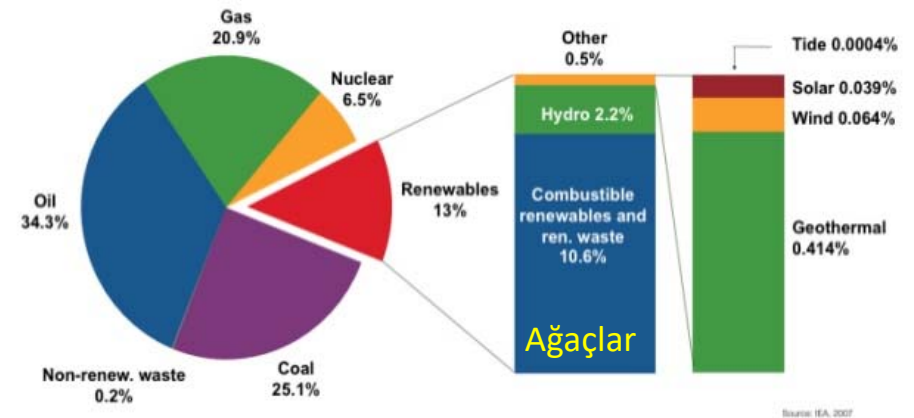
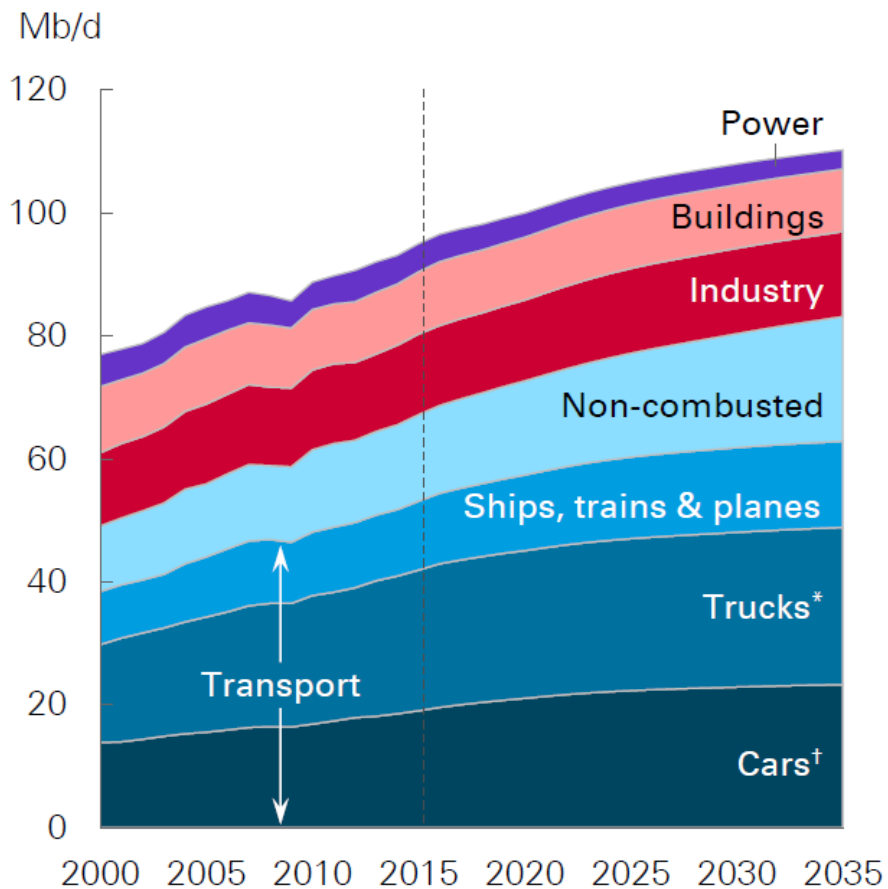
GLOBAL ENERJİ TALEBİ 2040 TAHMİNİ





HAM PETROL vs YENİLENEBİLİR ENERJİ

Liquids demand



Global Primary Energy Demand

© Hassan Harraz 2016

7

Global oil demand in 2015: 95 Mb/d

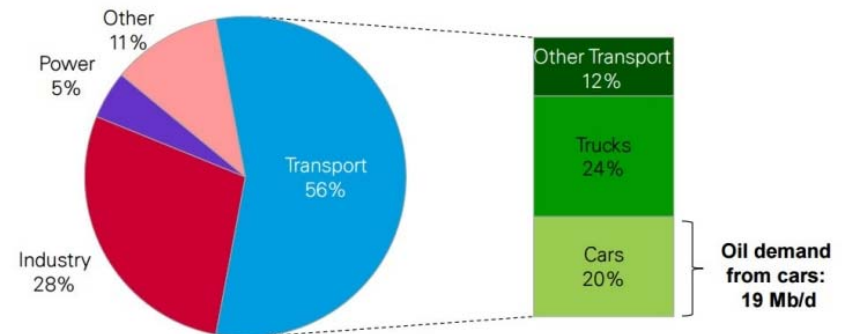


Chart 1

© BP PLC 2016



KING HUBERT's TAHMİNİ - 1956

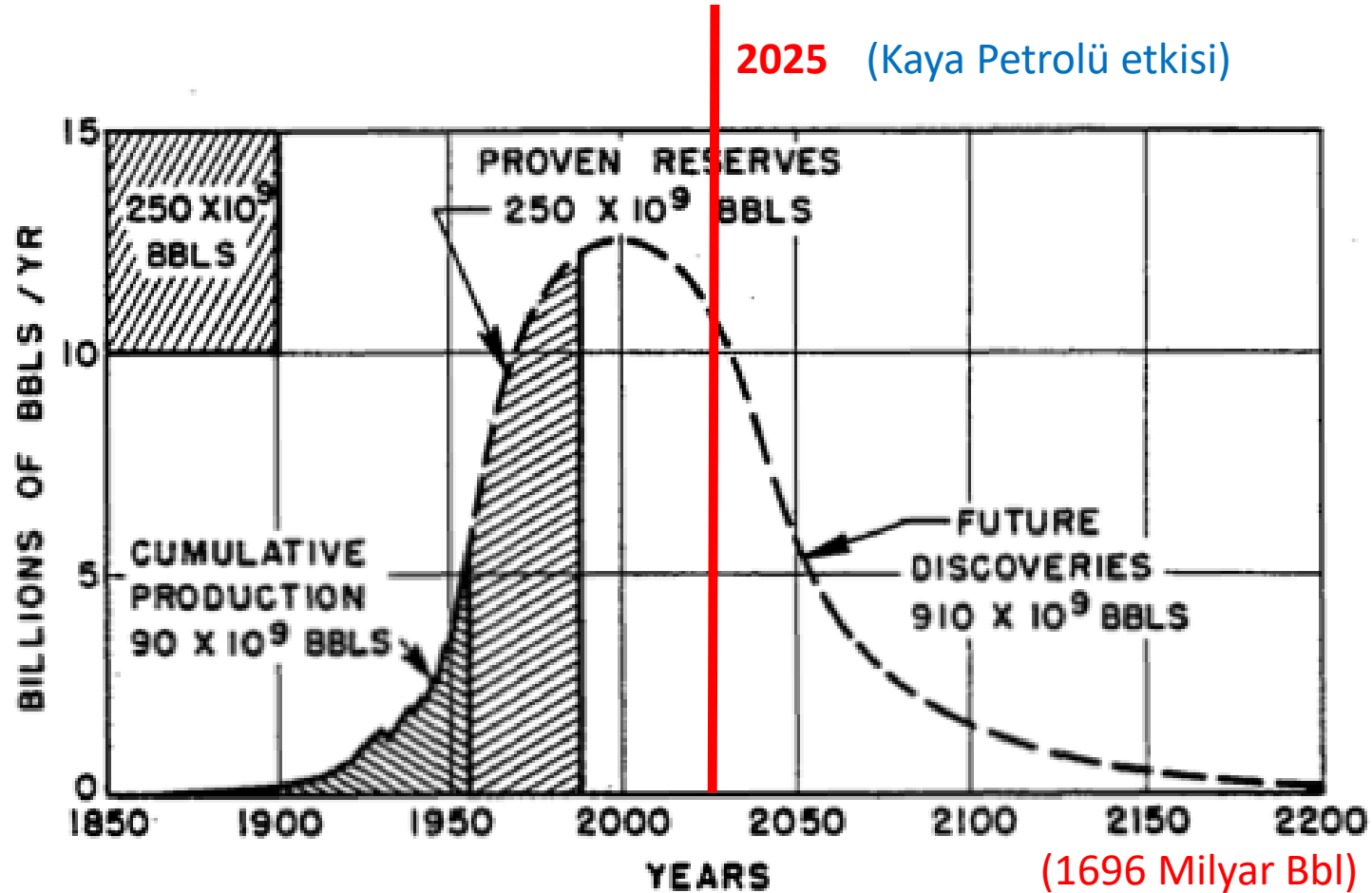
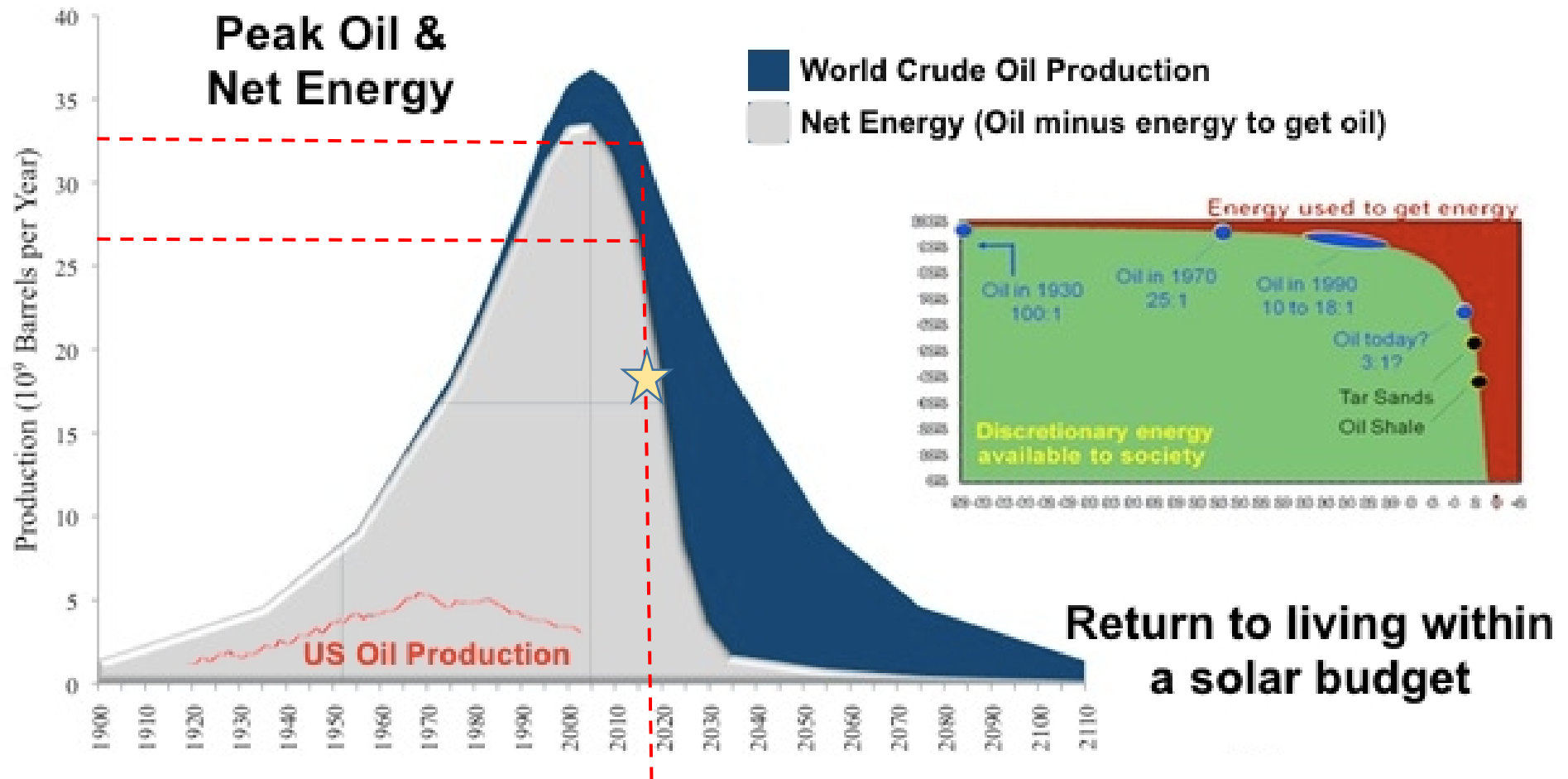


Figure 20 - Ultimate world crude-oil production based upon initial reserves of 1250 billion barrels.



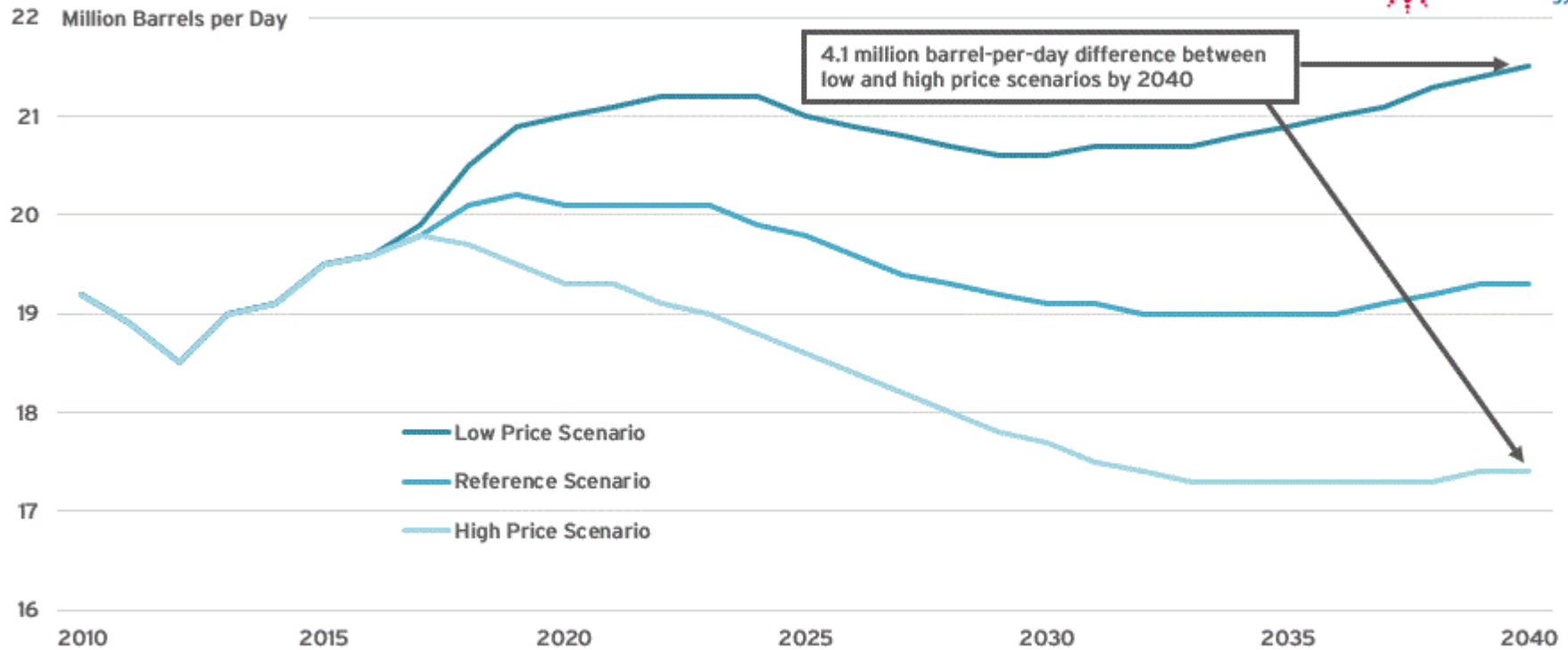
PETROL İÇİN GEREKLİ PETROL





PETROL FİYAT TAHMİNLERİ 50 - 225 \$/Bbl

Variation in U.S. Oil Consumption Through 2040



Note: Variation through 2040 is dependent on EIA oil price assumptions (Reference = \$ 110; High = \$225; Low = below \$50).

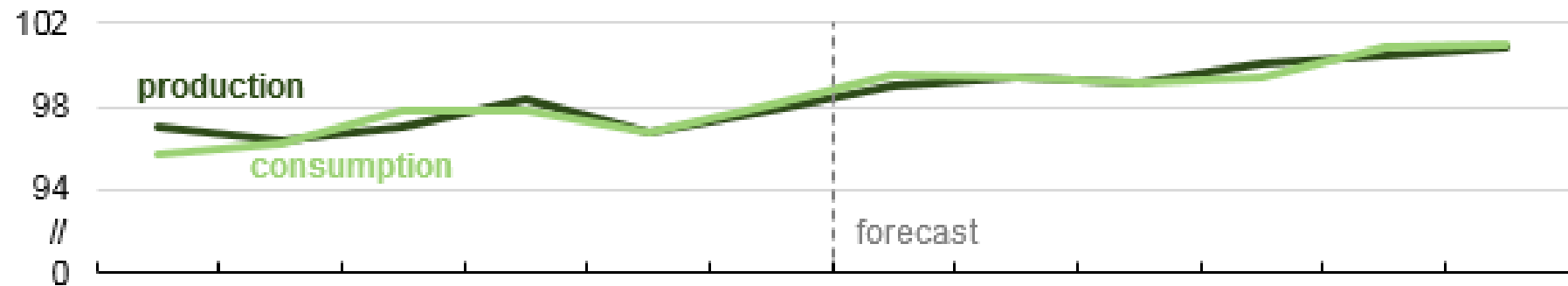
Source: SAFE Analysis Based on EIA IEO



FİYAT İSTİKRARINDA FARZ - TALEP DENGESİ HASSASİYETİ

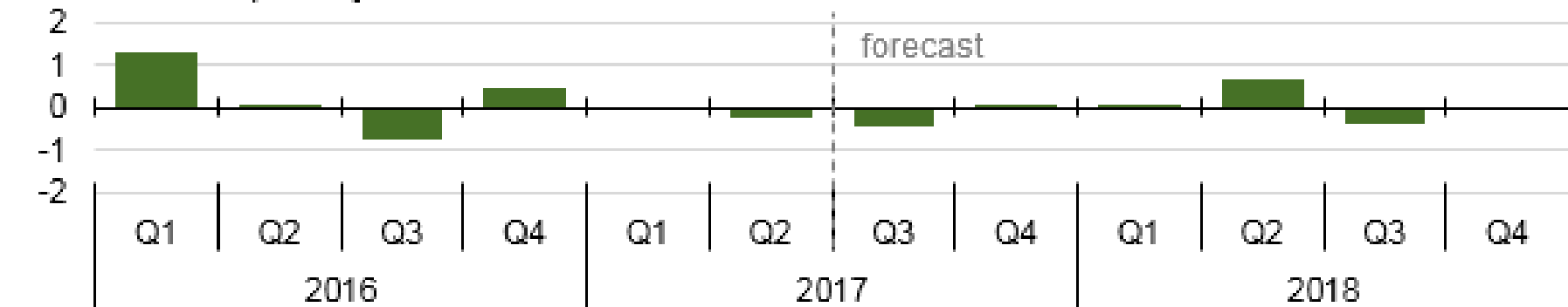
Global production and consumption of crude oil and other liquids (2016-2018)

million barrels per day



Implied stock change (2016-2018)

million barrels per day

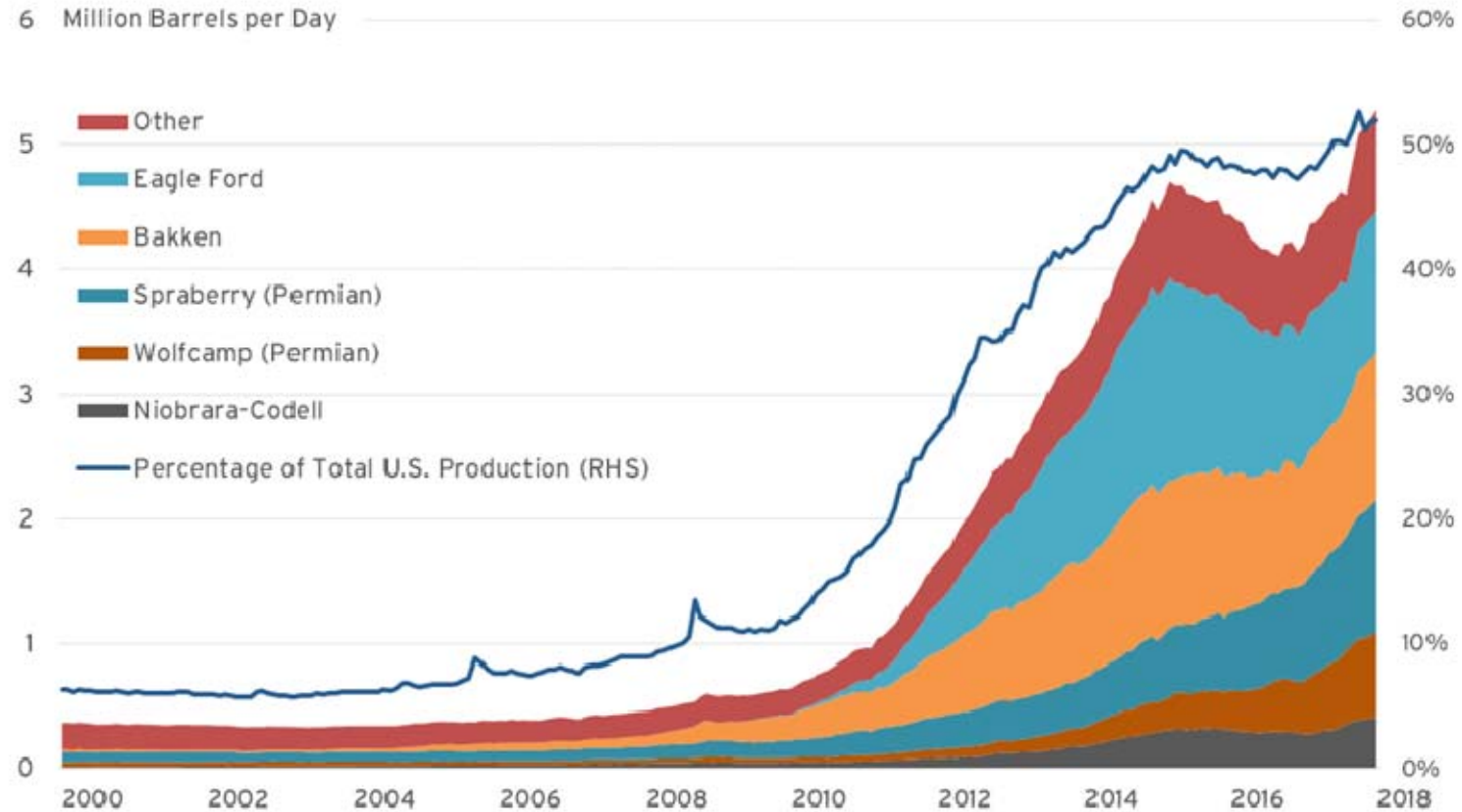




ABD KAYA PETROLÜNÜN FİYATA ETKİSİ

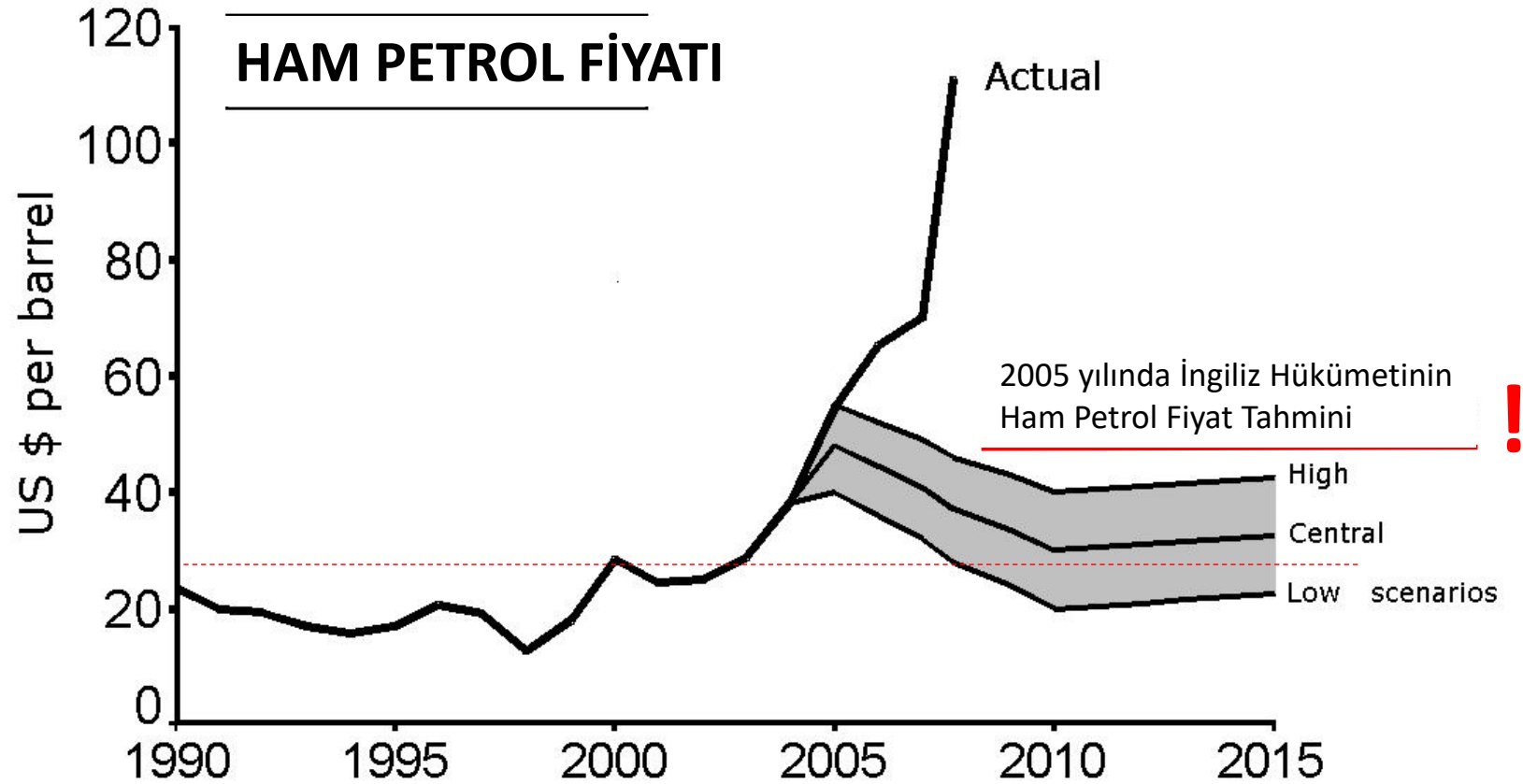
- Kaya petrolü Amerikan yerli üretiminin %50 sini karşılıyor
- Kuyularda İlk 3 yıl dan sonra depletion başlıyor. Sürdürülebilir değil.
- Üretimde devamlılığı sağlayabilmek için 1600 kuleye ihtiyaç var

Shale Accounts for More Than Half of U.S. Crude Oil





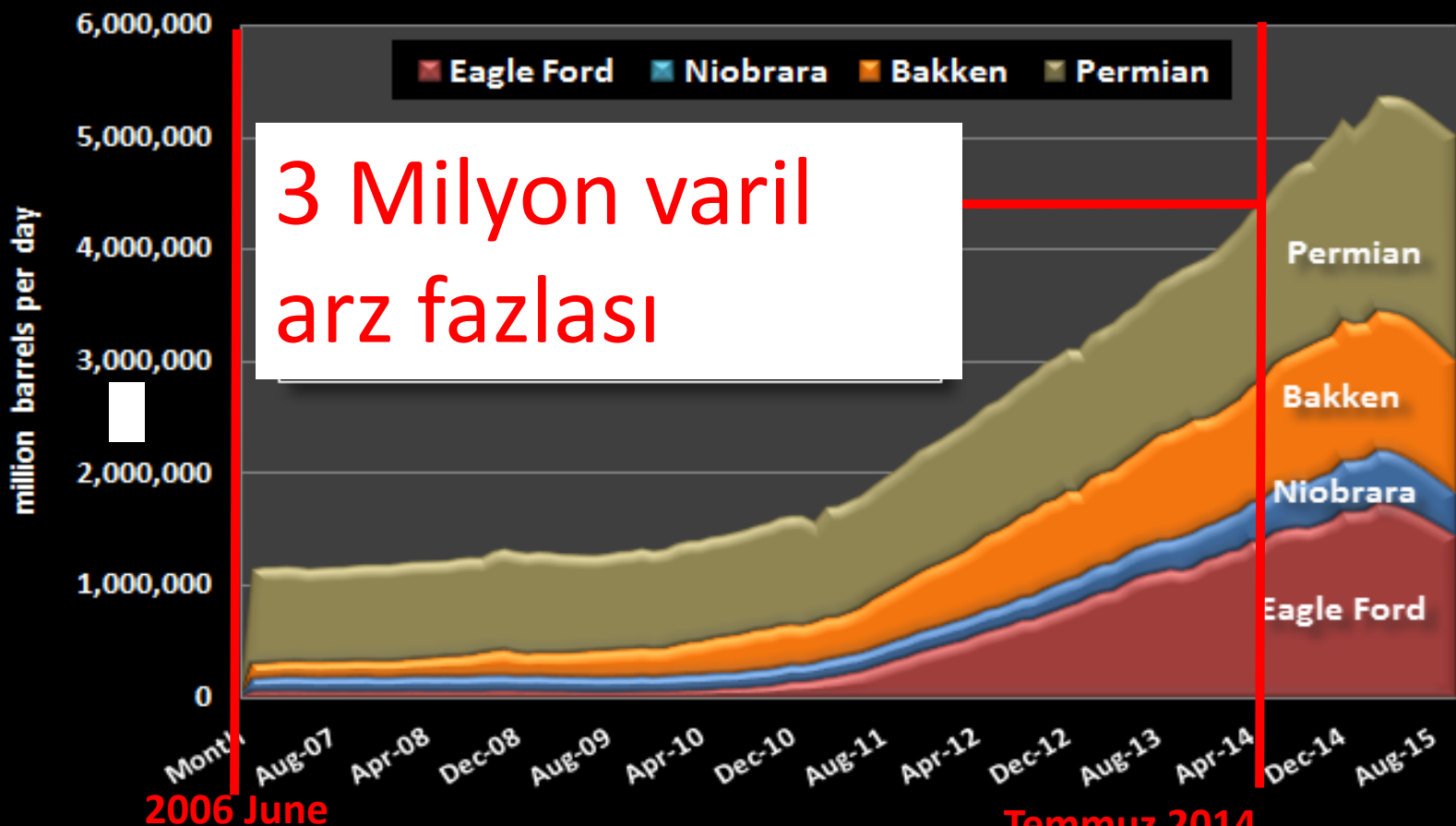
İNGİLTERE'NİN FİYAT TAHMİNİ – SFA 2016 SUNUMUNDAN





KAYA PETROLÜNÜN FİYATLARA ETKİSİ – SFA 2016 SUNUMUNDAN

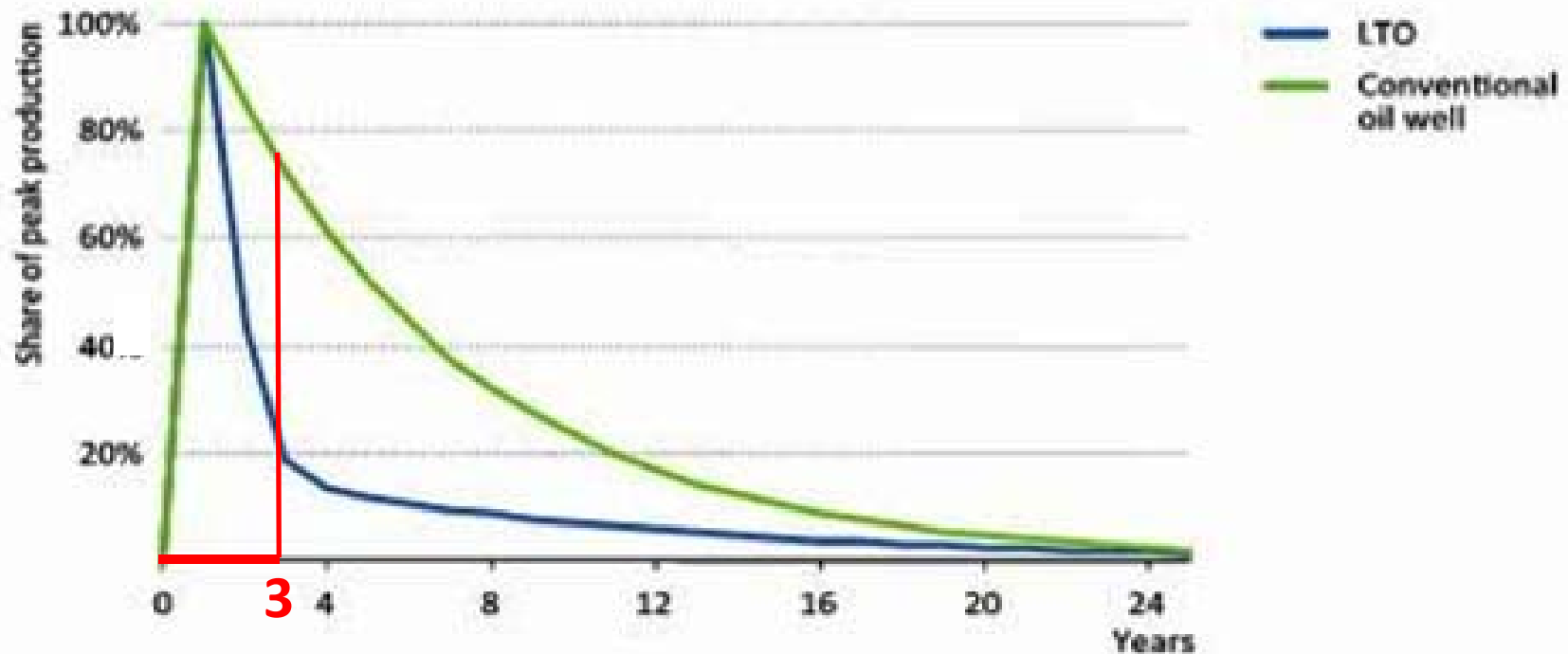
Top 4 Shale Oil Fields Production





KAYA PETROLÜNÜN FİYATLARA ETKİSİ –SFA 2016 SUNUMUNDAN

Figure 14.4 ▶ Typical production curve for a light tight oil well compared with a conventional oil well



Temmuz 2014 – Temmuz 2017 (2017 den itibaren fiyat artışları kaçınılmazdır)



DEĞERLERDİRME – SFA 2016 SUNUMUNDAN

TARİH	Arz fazlası Varil/Gün
2014 HAZİRAN	3,0M
2016 OCAK	1,8M
2017 OCAK	1.0M
2017 TEMMUZ	0.5 M
IEA	Talep Varil/Gün
2016	92.5M
2040	103.5M
TALEP ARTIŞI	0.5M

İPTAL EDİLEN ARAMA YATIRIMLARI USD

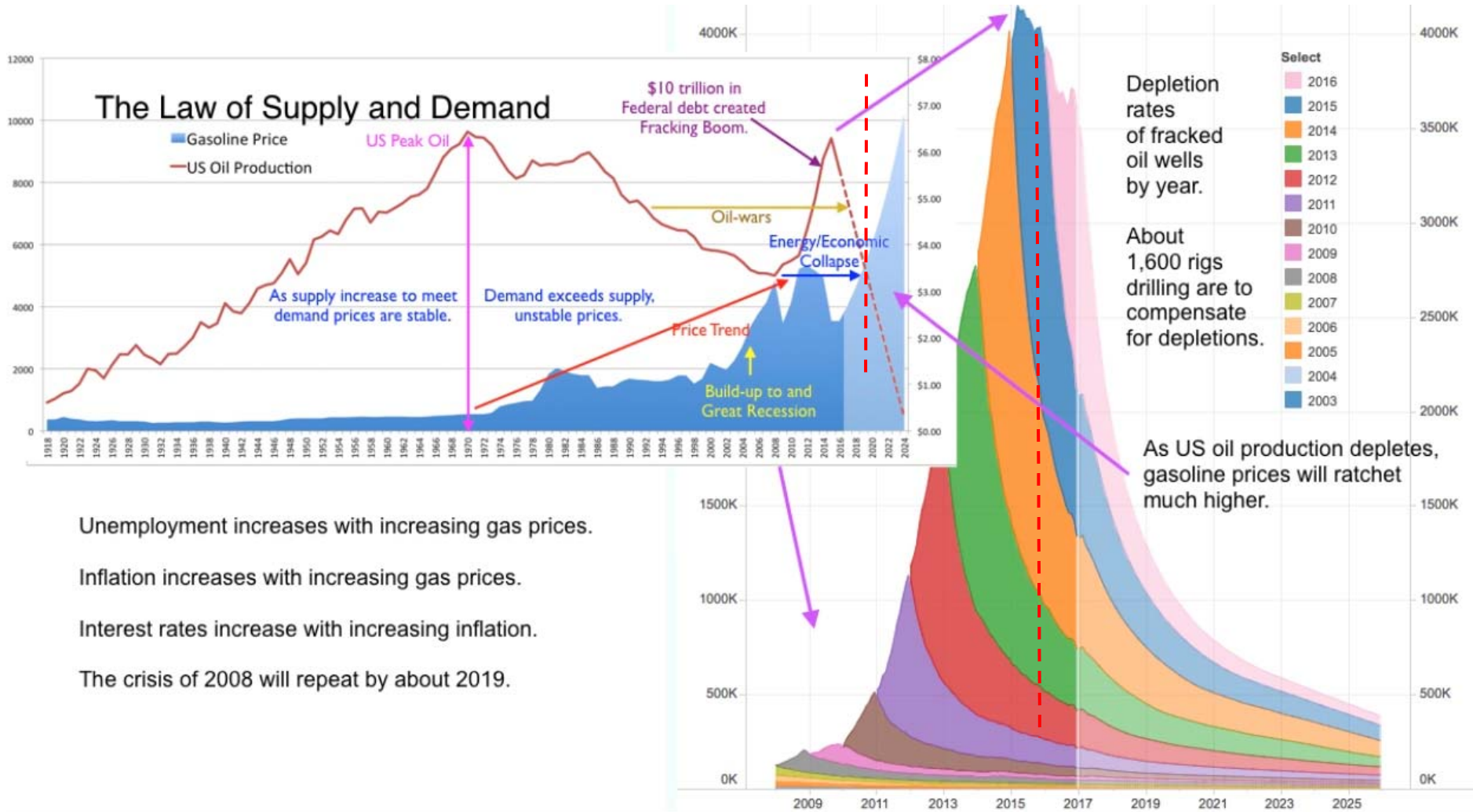
2015 KASIM	380 MİLYAR
2016 ARALIK	1 TRILYON !!!



KAYA PETROLÜ – “BİR GÖRÜNDÜ BİR YOK OLDU SERAP MİSALİ”

2016 yılı Türkiye Enerji Zirvesinde Kaya Petrolü etkisinin kısa süreli olacağını sunmuştuk Ref: Slide 13-14

- 2017 ABD de kule sayısı 1600 den 500 kuleye düştü

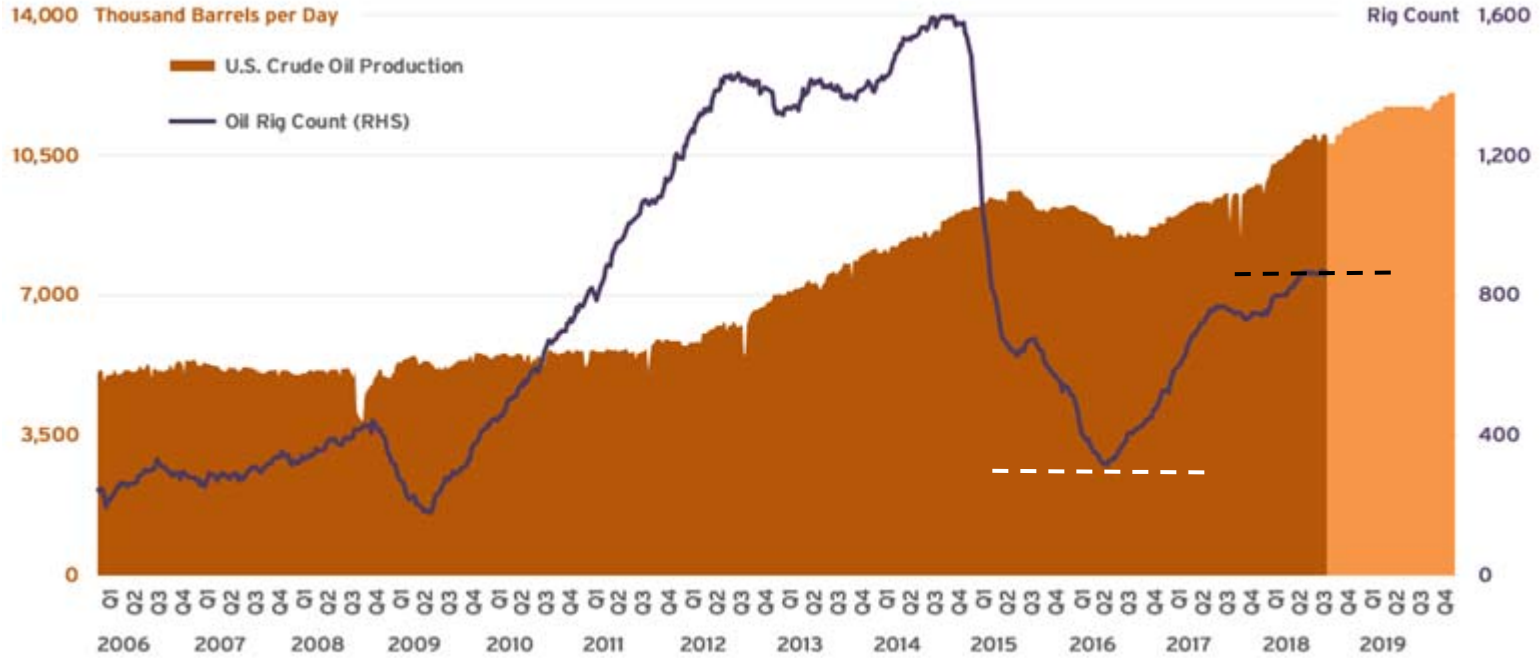




ABD HAM PETROL ÜRETİMİ

- KAYA PETROLÜ ÜRETİMİNİ KORUYABİLMEK İÇİN 1600 KULE GEREKİYOR

U.S. Crude Oil Production Reaches 11 Mbd Historic High



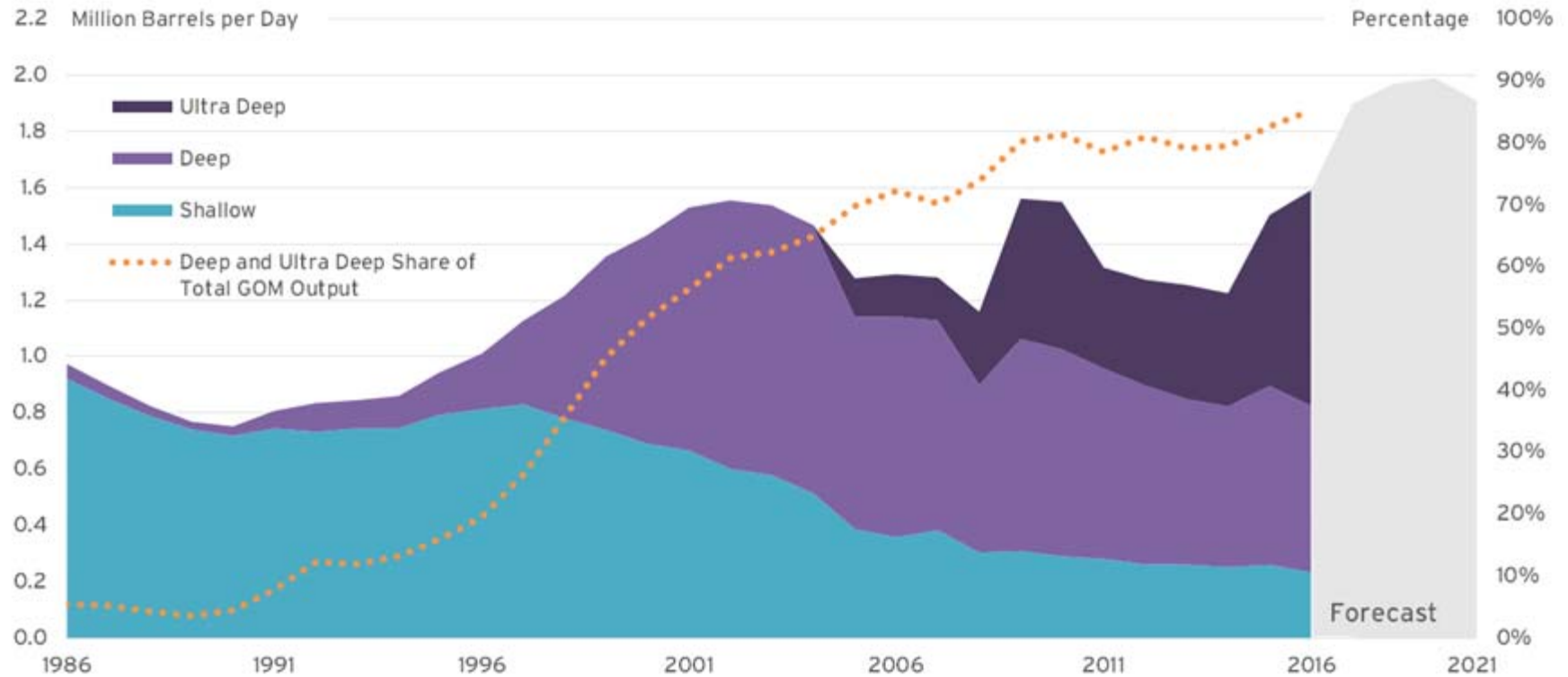
Source: EIA and Baker Hughes



DERİN DENİZ SONDAJLARI

**Derin deniz sondajları yatırımları 2018 yılı itibarıyla artıyorsa
7 kardeşlerin elbette vardır bir bildikleri !!!**

Gulf of Mexico Production by Water Depth



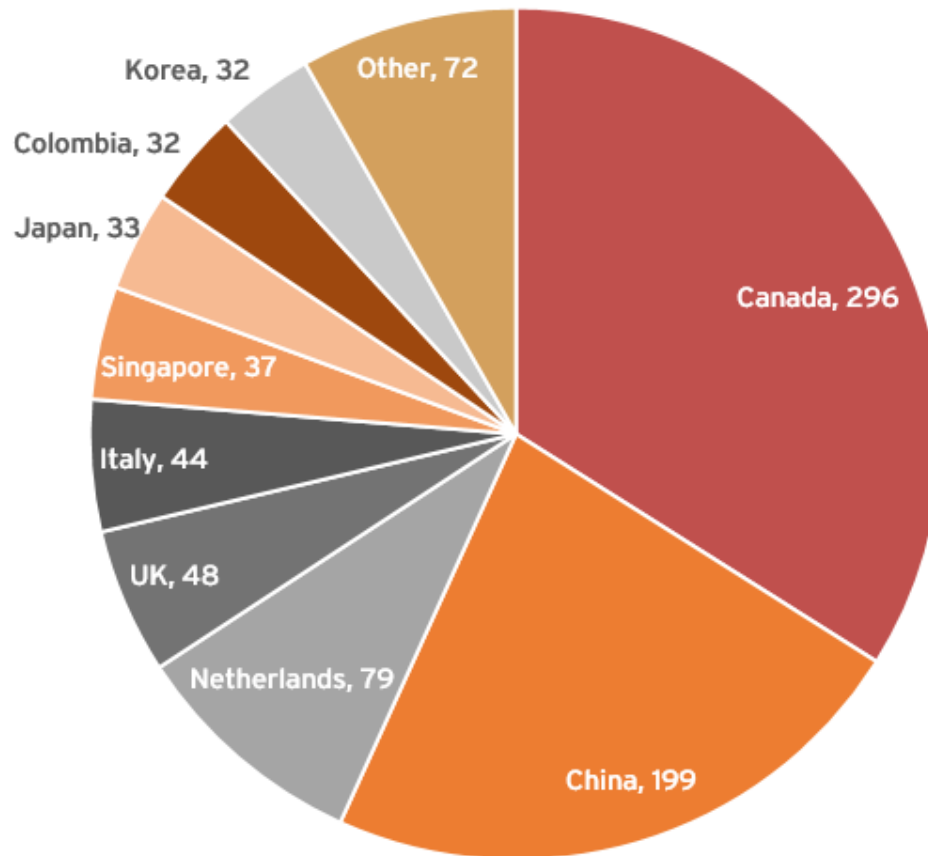
Source: SAFE analysis based on data from BSSE, BOEM and EIA



ABD HAM PETROL İHRACATI

U.S. Crude Exports by Destination, 2017

Thousand Barrels per Day, through May



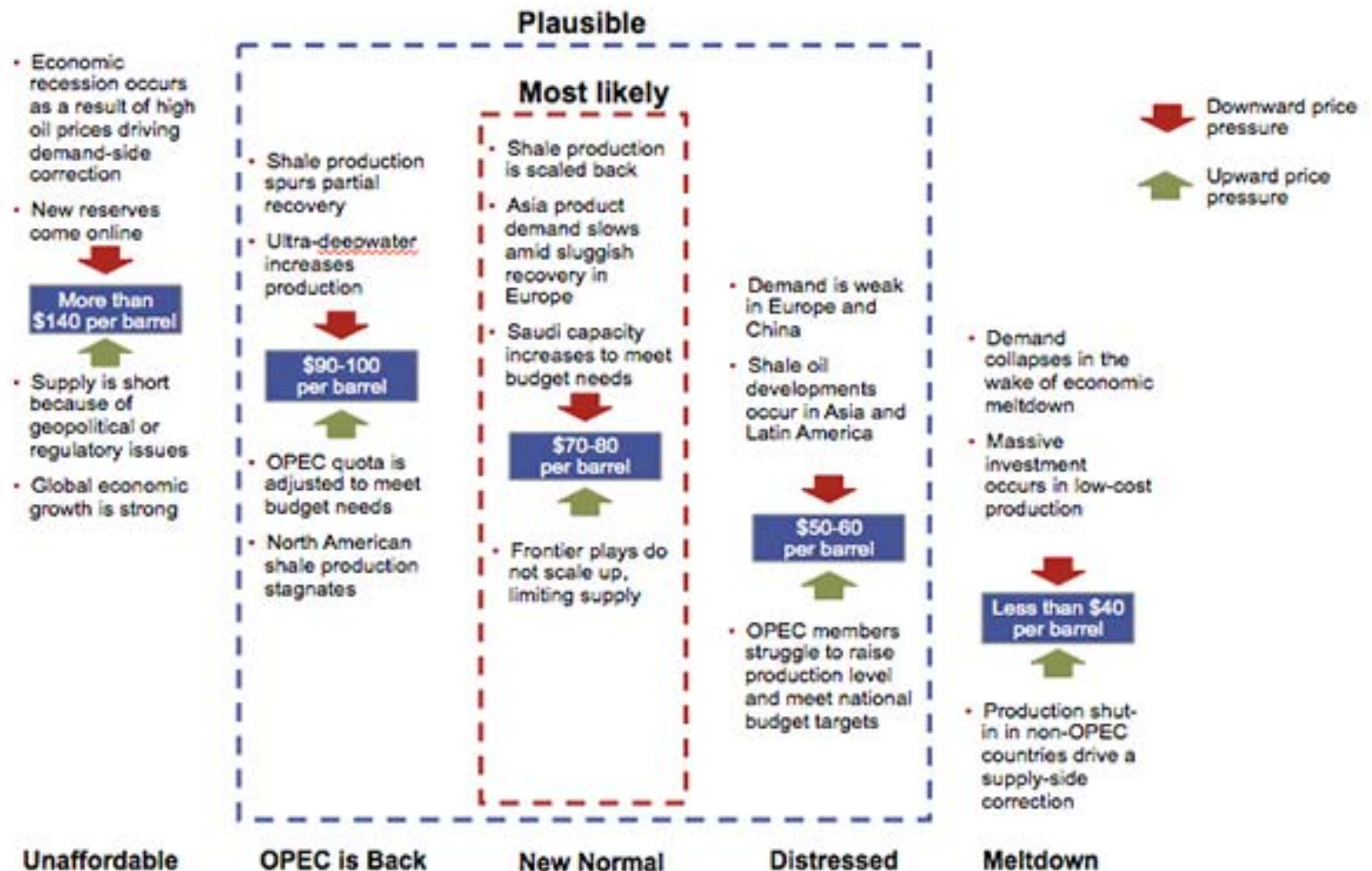
Source: SAFE analysis based on data from EIA.



HAM PETROL FİYAT SENARYOLARI

ATKearney

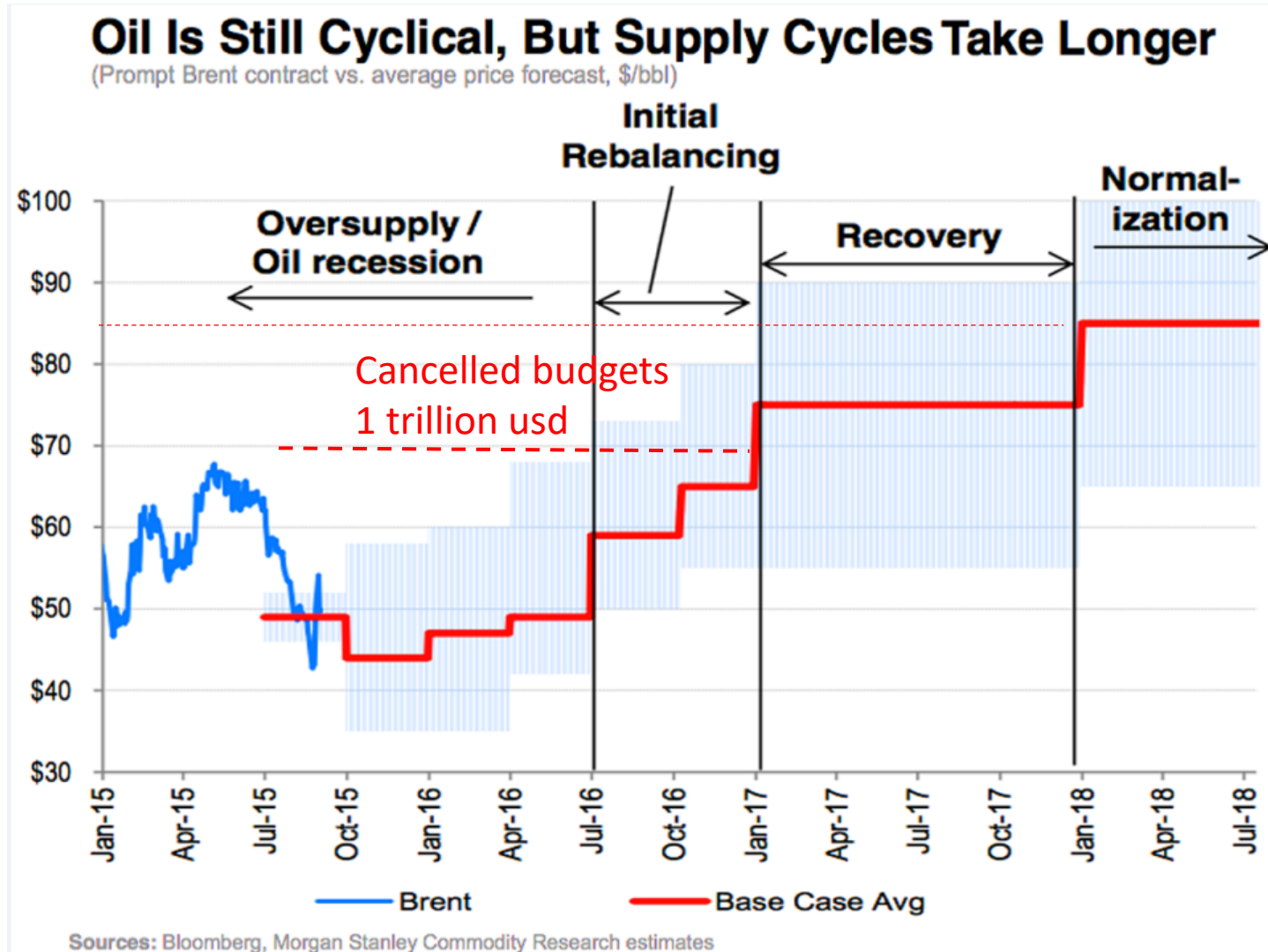
Ham Petrol Fiyat Senaryoları





MAKUL FİYAT

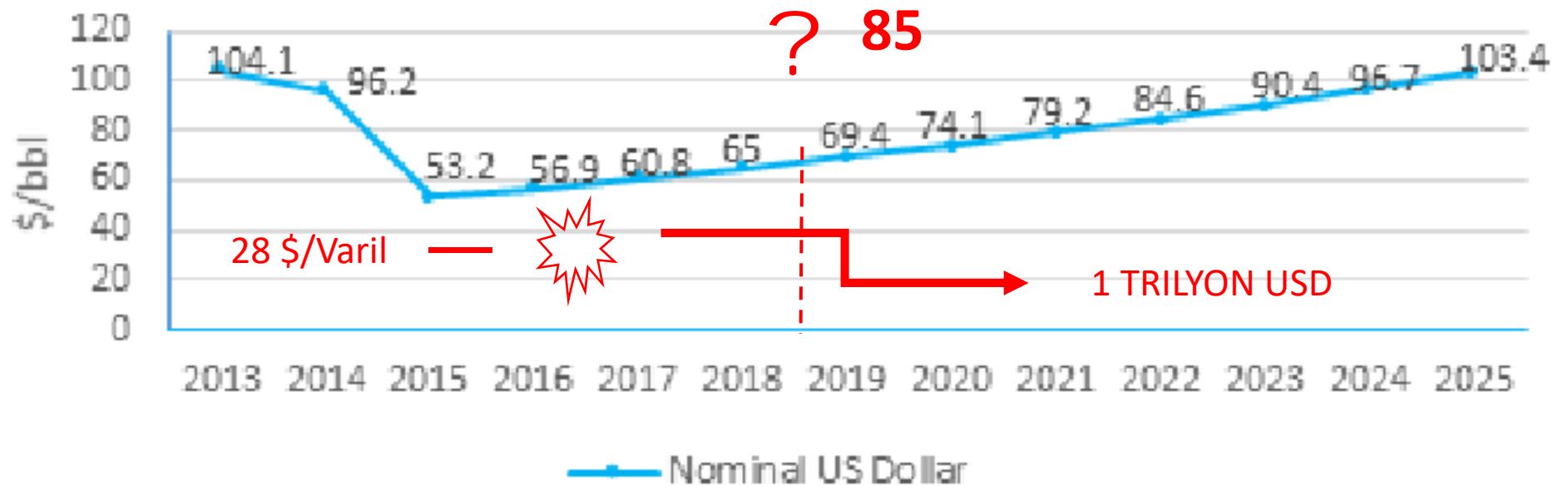
**NORMAL
85\$/Varil**





DÜNYA BANKASI TAHMİNLERİ

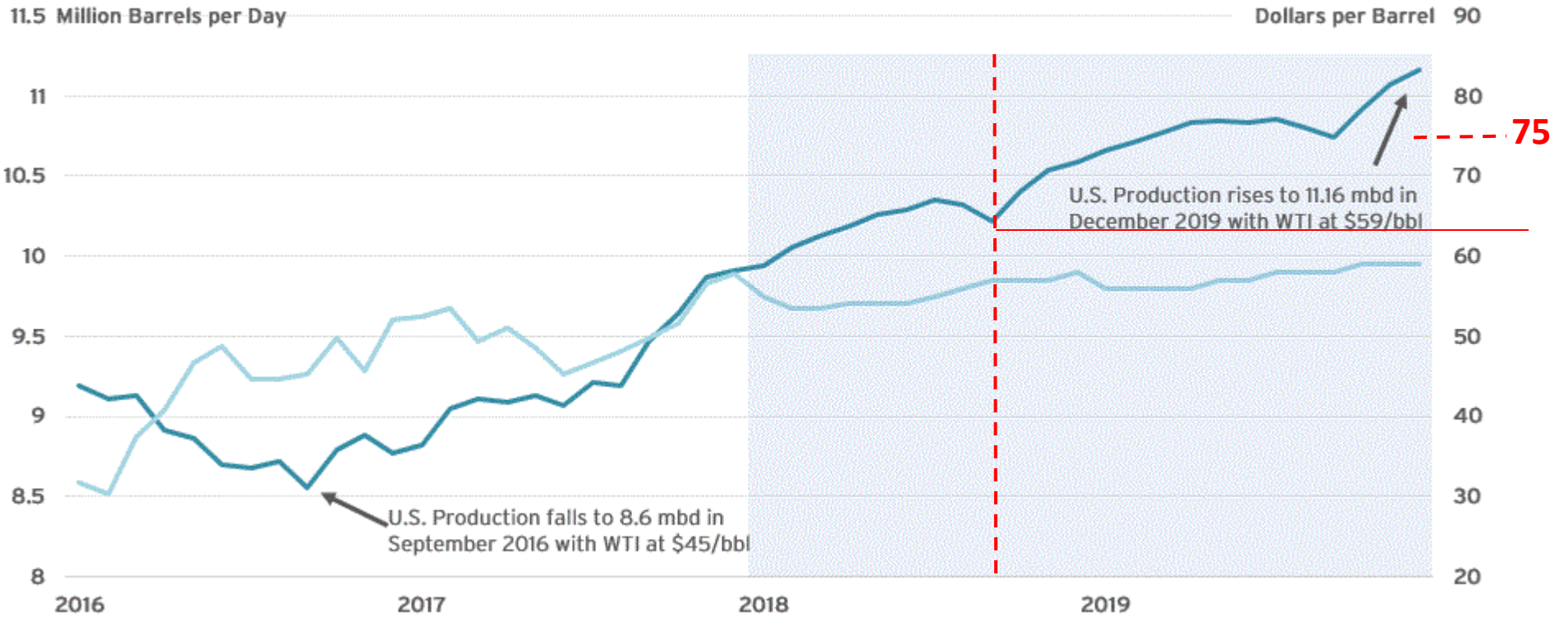
World Bank: Crude Oil , \$/barrel
average spot price (Brent, WTI, Dubai)





10 EKİM 2018 : WTI FİYATI 75\$/Bbl

EIA Revises U.S. Oil Production and Price Forecasts

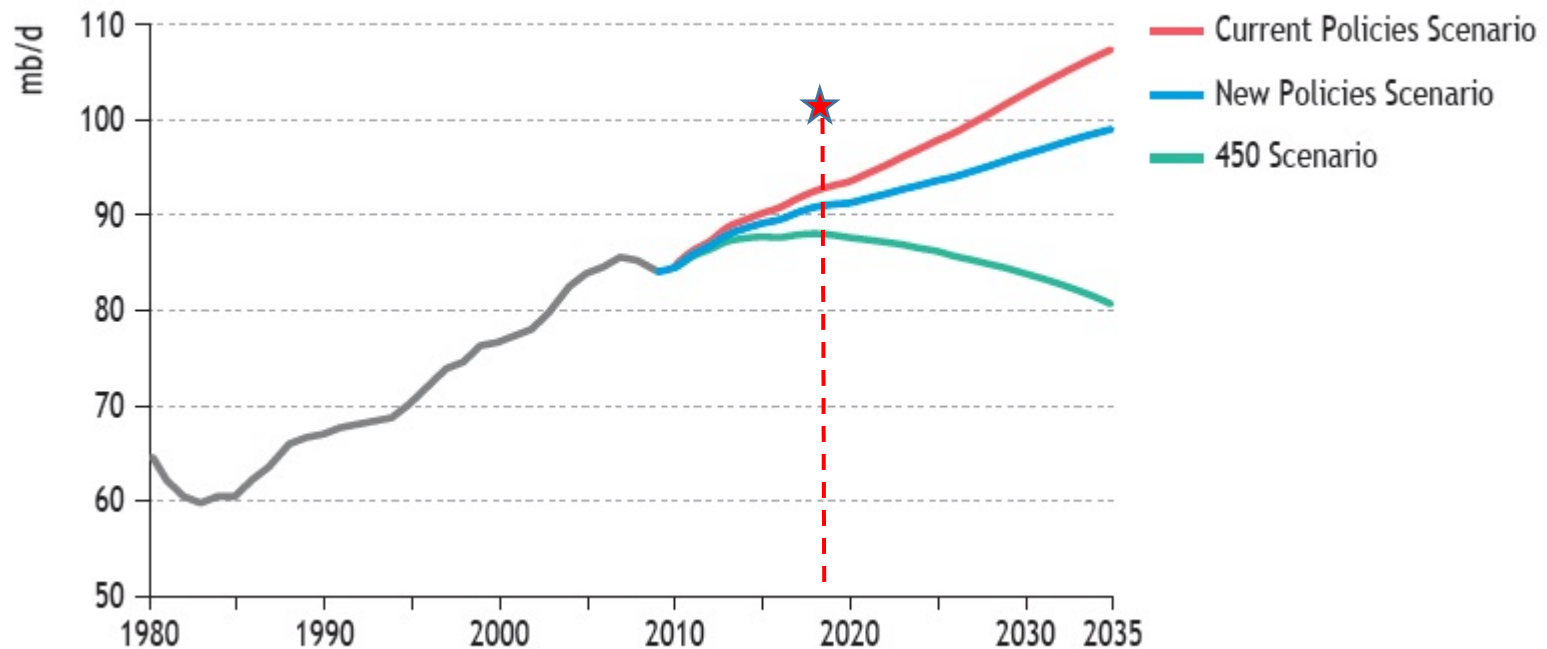


Source: EIA



GLOBAL HAM PETROL İHTİYACI SENARYOLARI

Figure 3.1 • World primary oil demand by scenario



Note: Oil does not include biofuels derived from biomass.



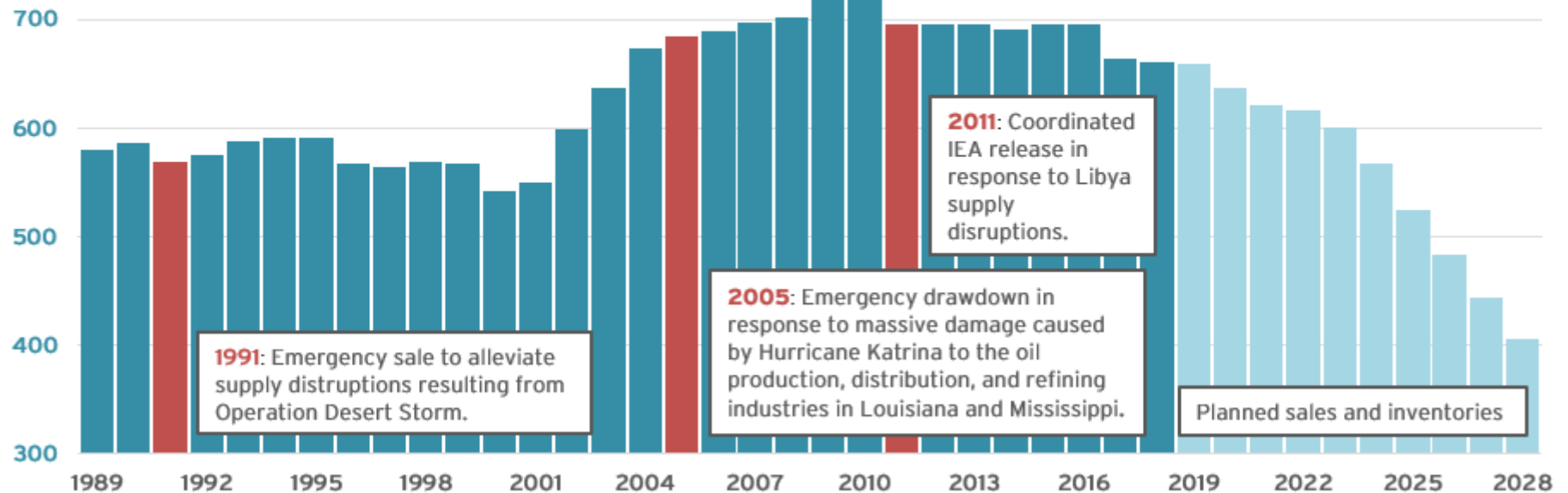
ABD STRATEJİK REZERVLERİ - PETROL FİYATI

Don't Tap That – Anticipated Withdrawals Make the U.S. Less Energy Secure

SPR Emergency Sales and Anticipated Inventory, 1989 to 2028



800 Million Barrels of Inventory

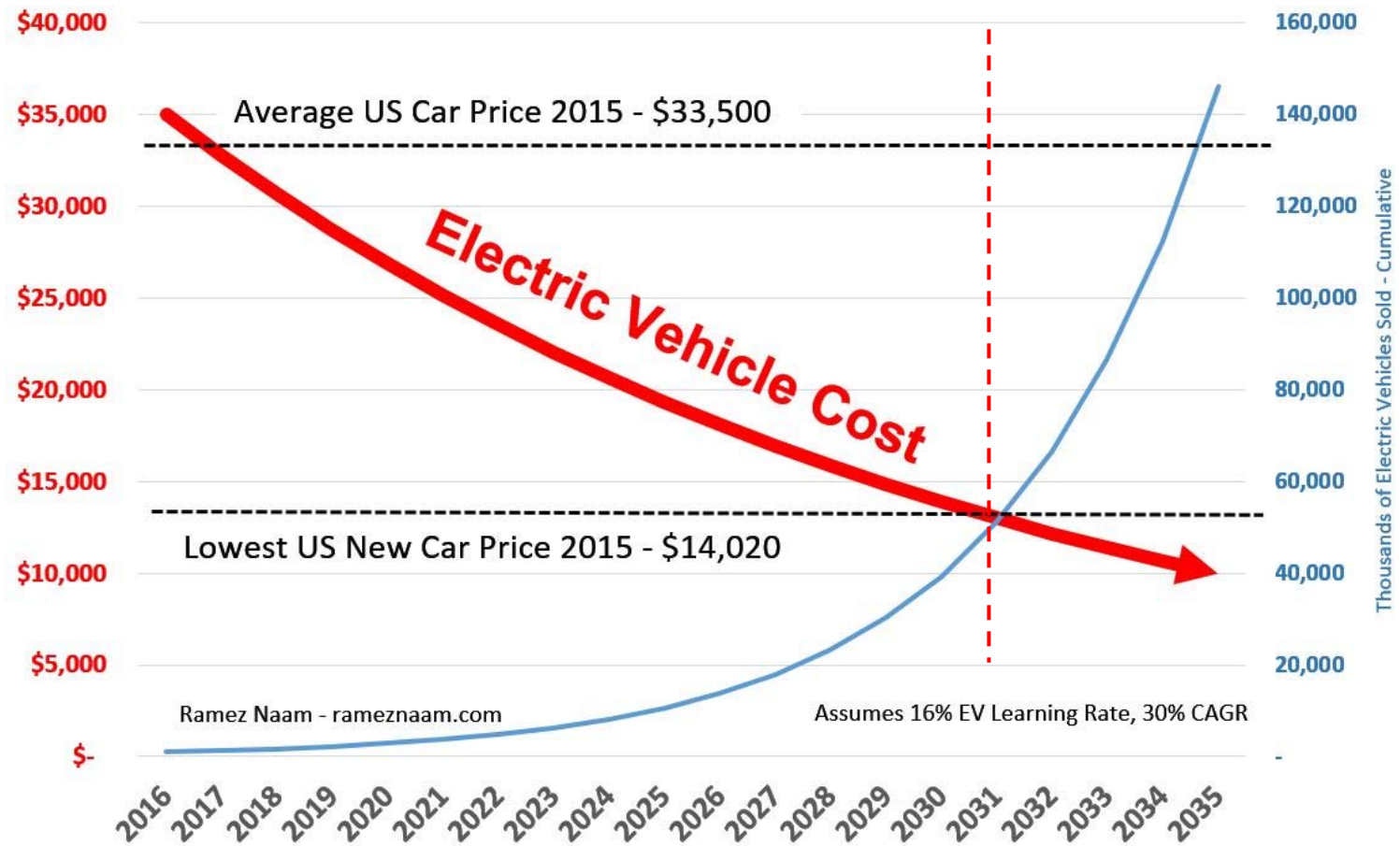


Source: EIA and Bloomberg, LP.



ELEKTRİKLİ ARABA MALİYETLERİ

Cost of 200 mile range EV

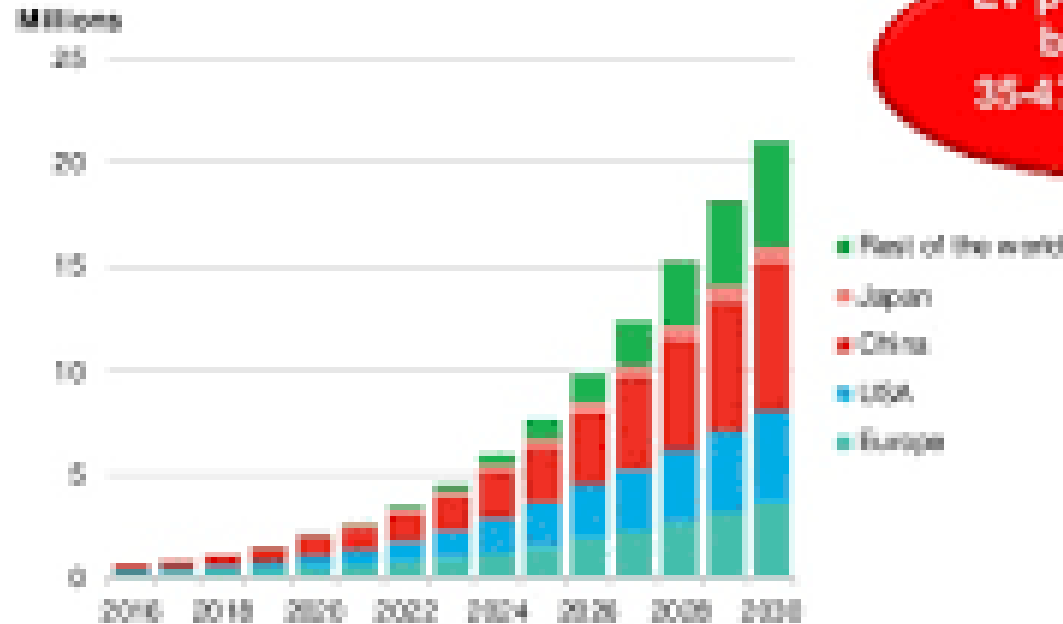




2040 YILINDA ELEKTRİKLİ ARAÇLAR

YENİ TRAFİĞE ÇIKAN ARAÇLARIN %35 – 47 si EV

BNEF global EV sales forecast by region



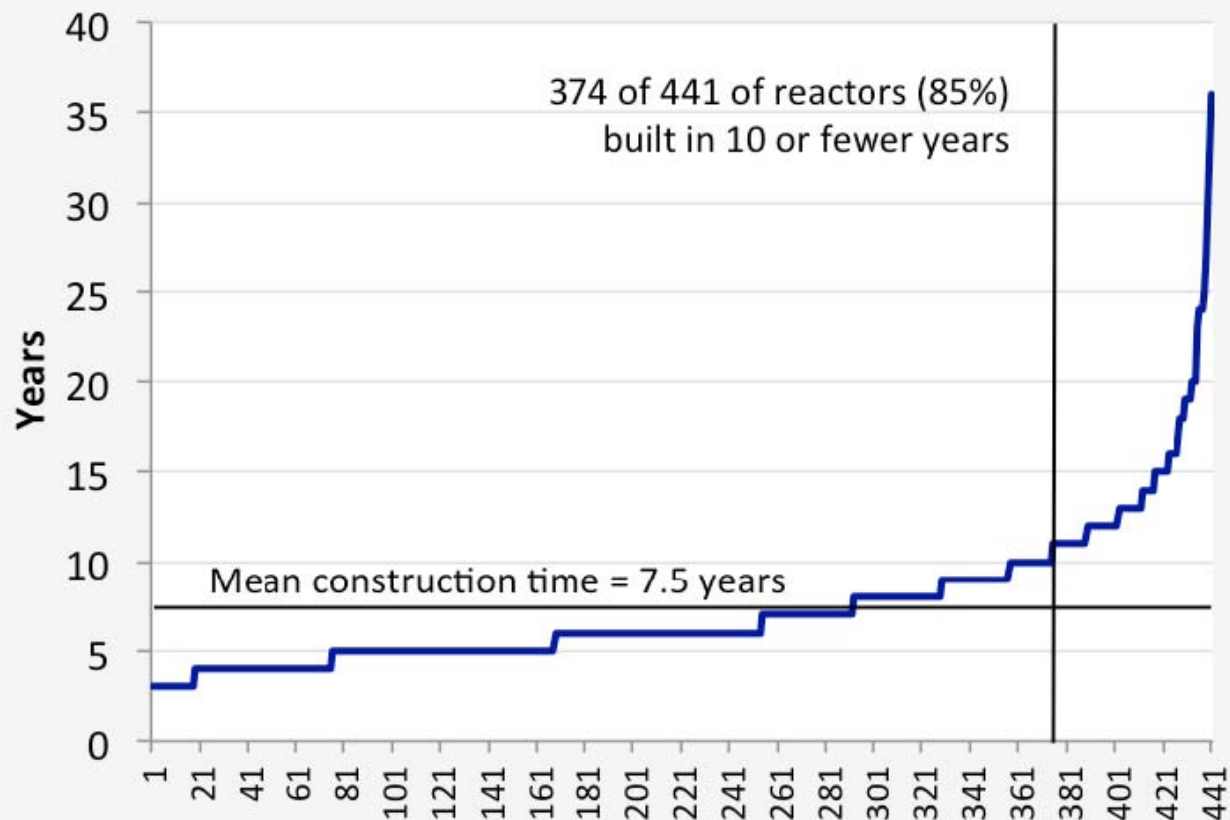
EV penetration
by 2040
35-47% of new
GMs

Note: Forecast uses <https://www.bnef.com/press-releases/2017/04/25/bnef-2017-annual-energy-outlook-uses-2017-prior-scenarios-projecting-2018-to-2040> for 2018 to 2040 per latest between 2018 and 2020.
Source: Bloomberg New Energy Finance.



NÜKLEER ENERJİ SANTRALİ ORTALAMA İNŞA SÜRESİ

Construction time

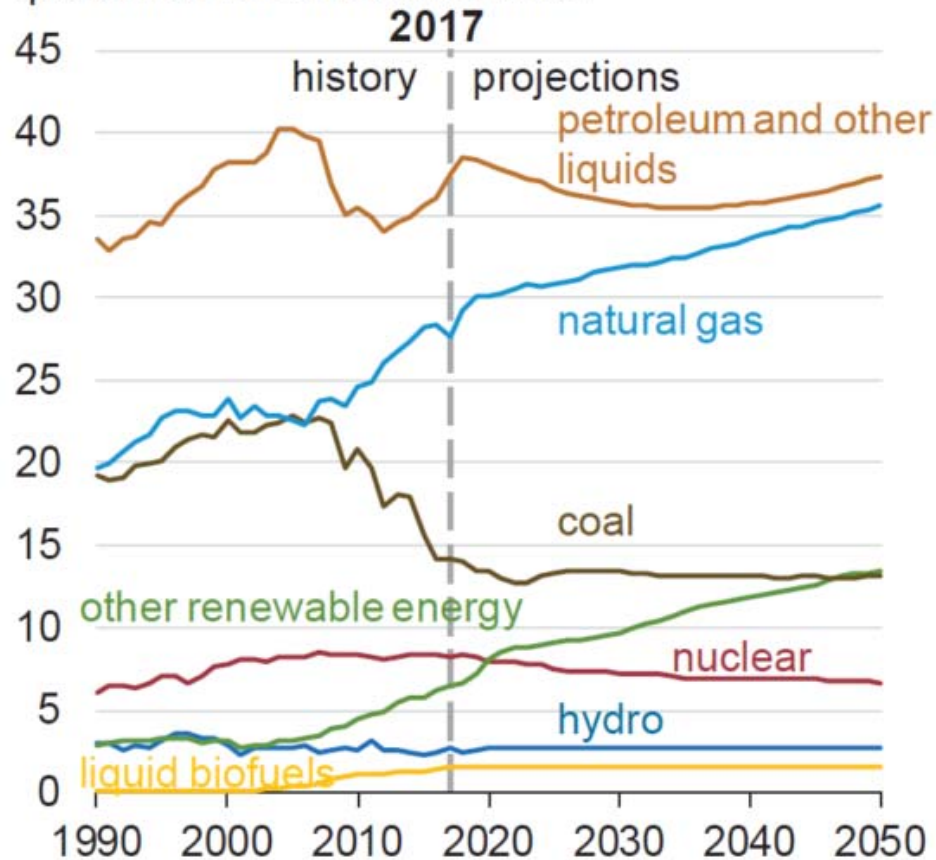




PETROL VE GAZ ENERJİNİN PATRONLARI

Energy consumption by fuel (Reference case)

quadrillion British thermal units





NETİCE : İŞİMİZE BAKALIM !!!

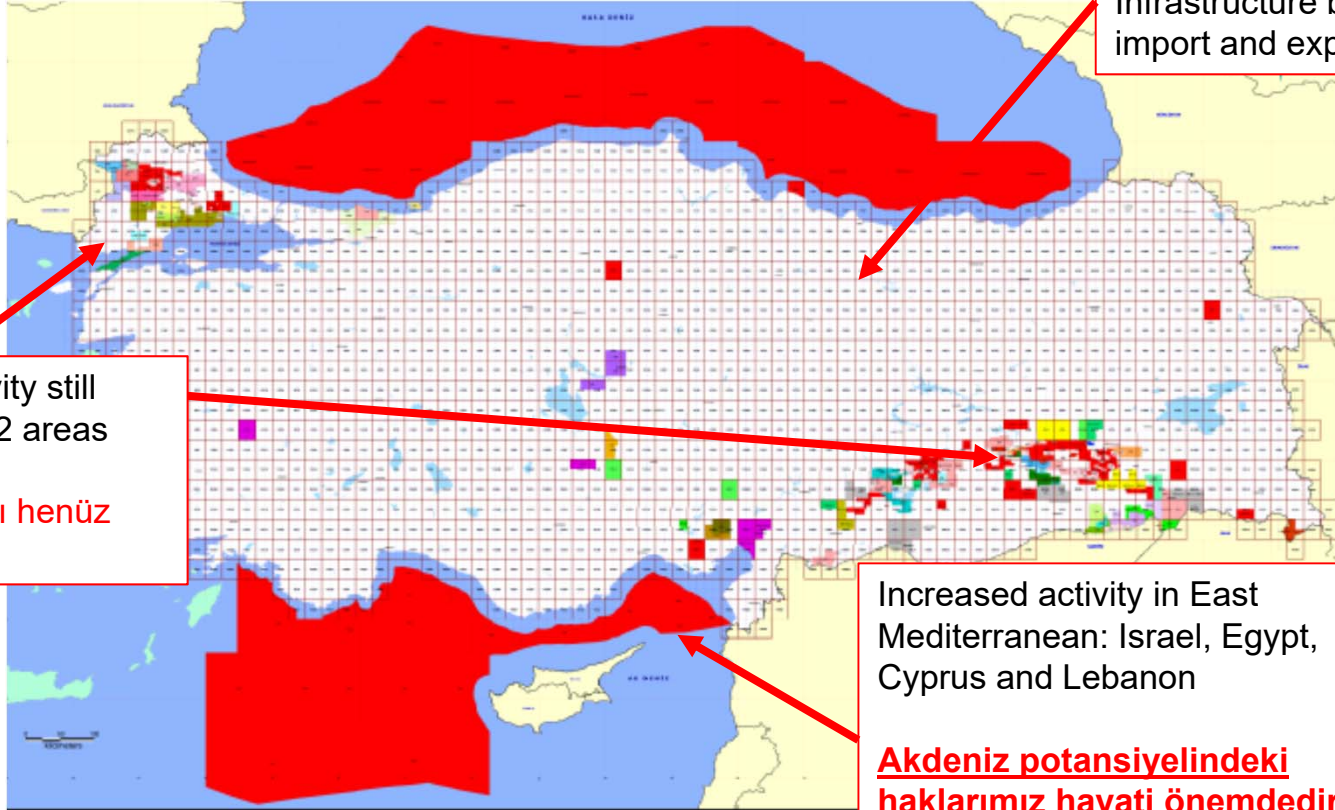
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TEŞEKKÜRLER

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