Türkiye's Contribution to Energy Security in SE Europe

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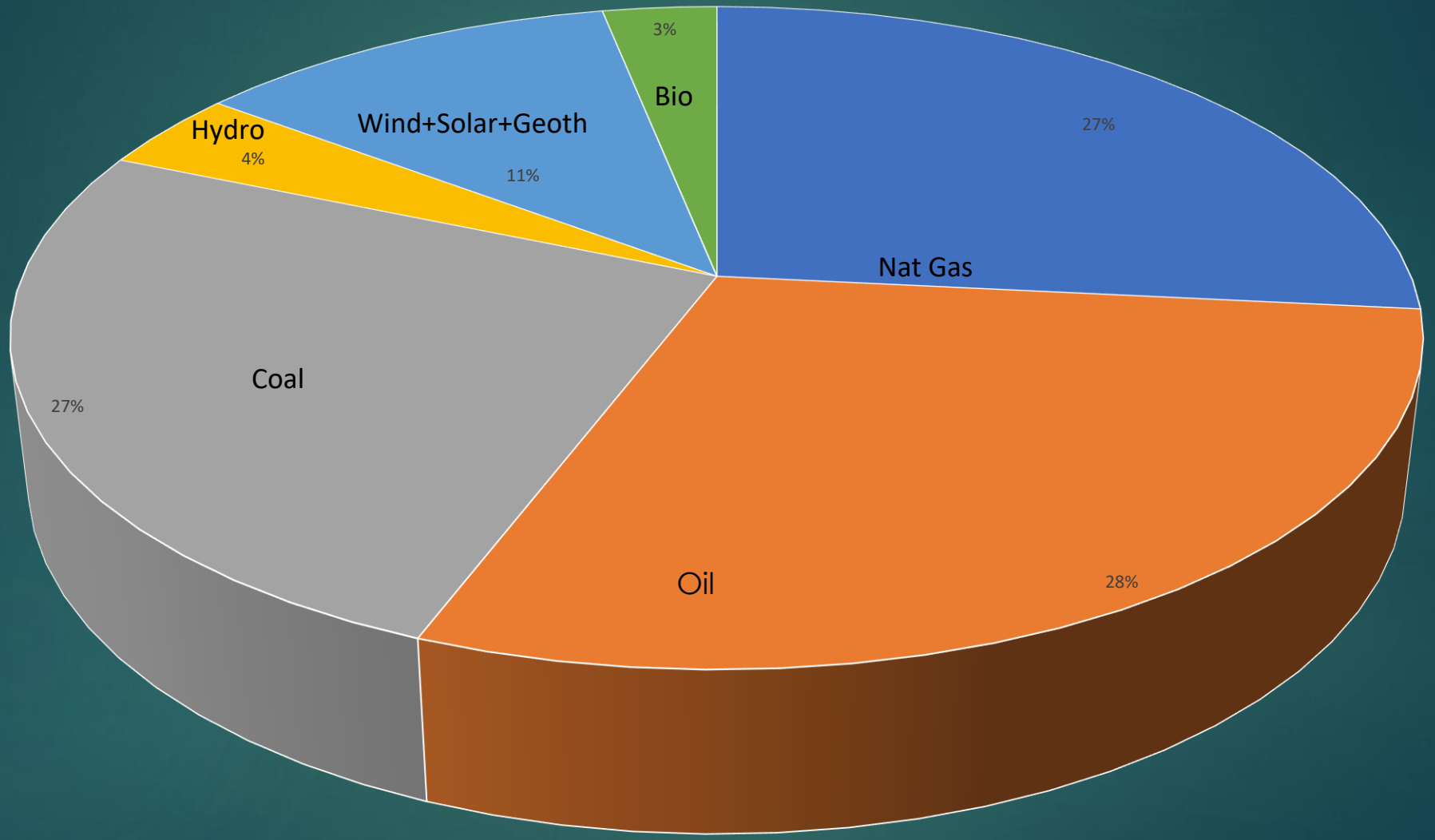
Turkish Economy - 2025



- Population: ~86 Million
- GDP: 1.59 Trillion USD
- GDP growth: 3.6%
- Gross External Debt Stock to GDP as of 31 Dec: 32.6 %
- Annual Consumer Price Inflation: 30.89%
- Trade volume: ~ 639 Bn USD
- 6th largest economy in Europe

Primary Energy Mix of Türkiye 2024

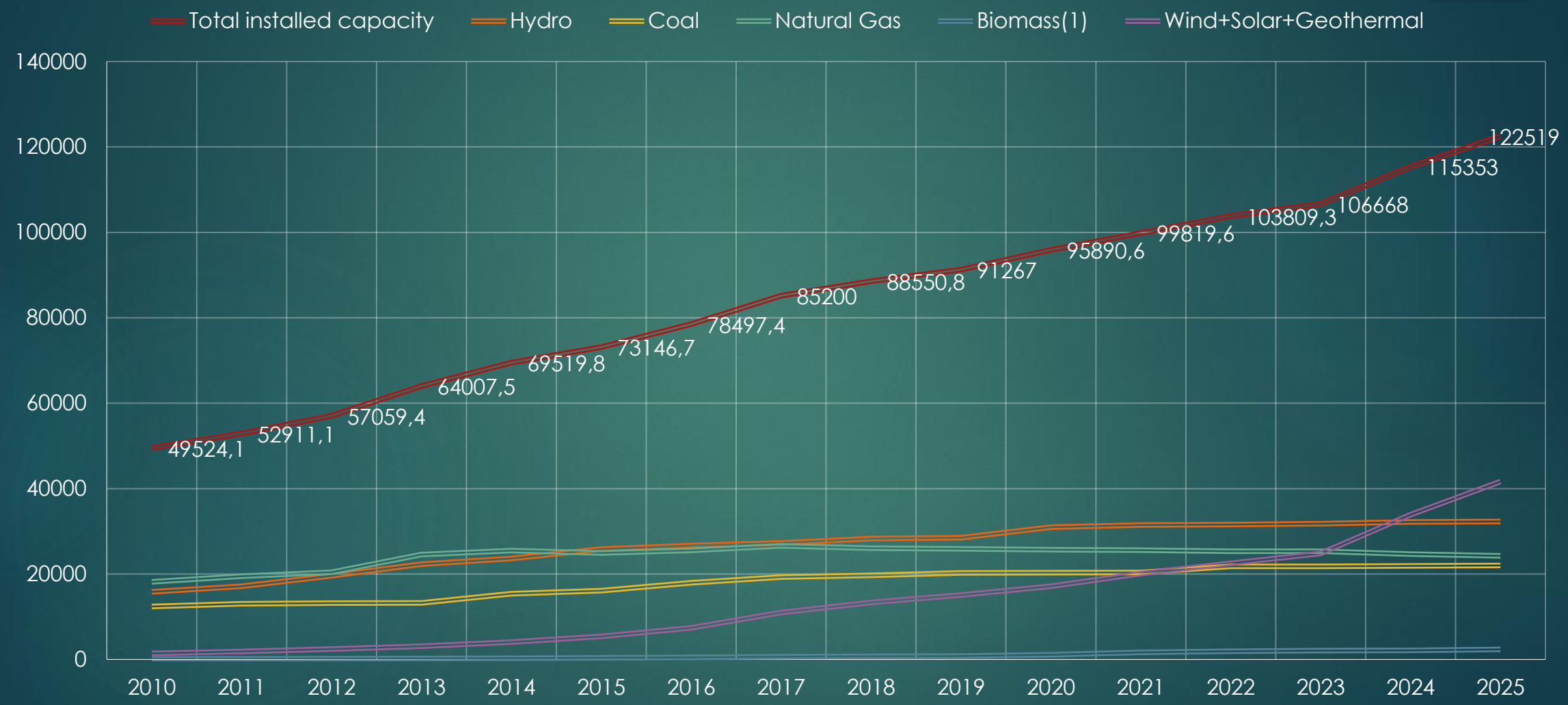
165.2 Mill toe, Share of imports: 67% - Share of Renewables: 18.6%



2035 Target: 23.7% Renewables, 5.9% Nuclear

Source: ETKB

Development of installed capacity



2025: Renewables 76,3 GW – 62 % of total; 2035 Target: Renewables 122.7 GW – 65% of total

Renewables – Backbone of energy security?

- Greece, Romania and Türkiye leading by the deployment of Renewable energy,
- Problems regarding the intermittent character of solar, wind and hydro,

- Resilient transmission system
- BESS investments
- Pumped storage

Nuclear is Part of the Energy Security

Akkuyu Nuclear Power Plant Mersin Province
Reactor design: NPP 2006 (WER-1200), 4 x 1200 MW
Construction period: 2018-2028
03 Apr 2018: Ground breaking ceremony of the first unit
23 Apr 2023: Fresh nuclear fuel for Unit 1 delivered

Commissioning stage of the first unit ongoing

Other Projects
Sinop NPP Inceburun, Sinop Province,
İğneada NPP, Kırklareli Province,
Ongoing negotiations with RF, China, S. Korea

Small Modular Reactor Project
Talks with UK, USA, France



Source: Akkuyu Nükleer A.Ş.

Natural Gas as Transition Fuel

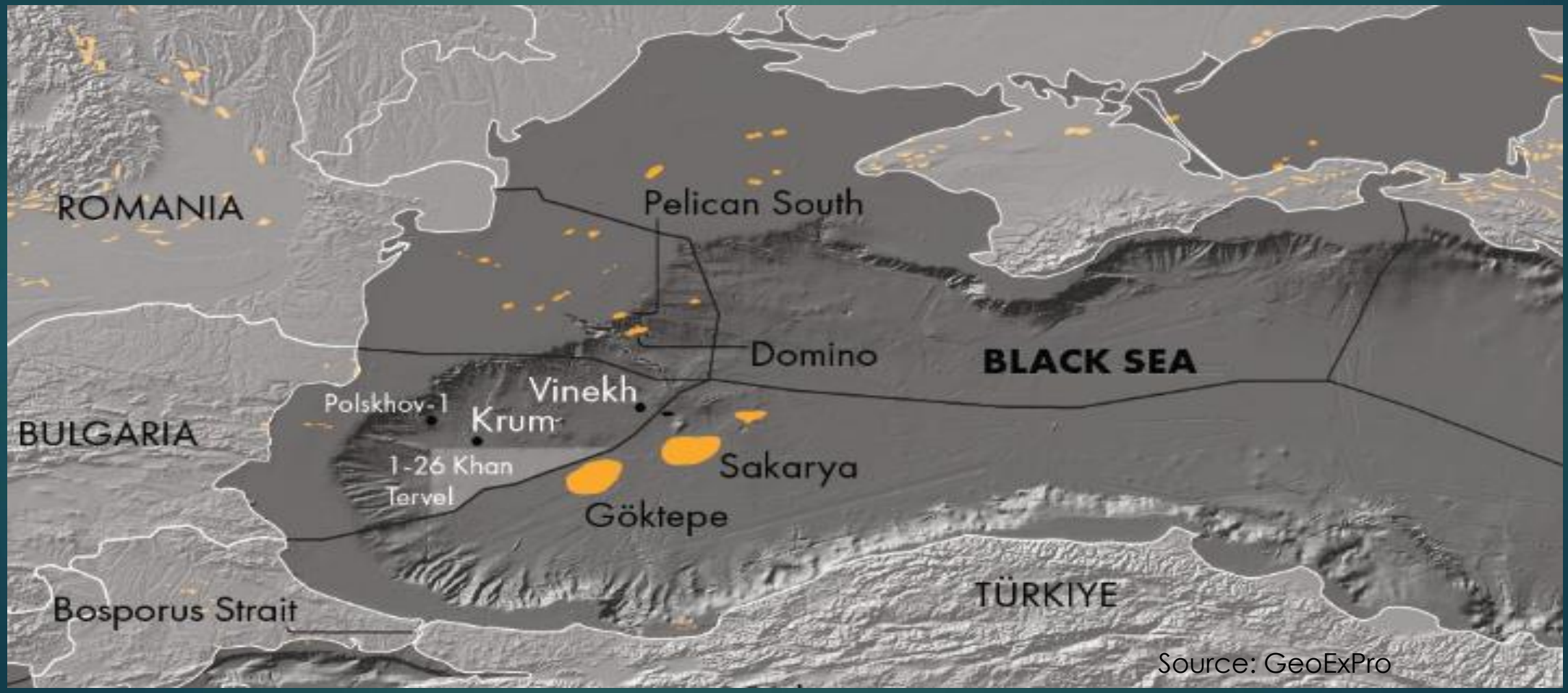
2025: Demand: ~ 58.6 bcm, Domestic production 3.2 bcm



UG Storage: 2 in operation, 6.3 bcm capa.
LNG terminals: 2 in operation
FSRU terminals: 3 in operation

WESTERN BLACK SEA – A NEW GAS BONANZA?

Neptun Deep, Romania: Exploration & Development
Han Asparuh, Bulgaria: Exploration
Han Tervel, Bulgaria : Exploration
Sakarya, Türkiye : Exploration, Development & Production
Current Production : 9.5 mcm/d, Phase II ~20 mcm/d, Phase III ~40 mcm/d



Source: GeoExPro

DOMESTIC OIL & GAS INFRASTRUCTURE DEVELOPMENTS

- Marmaraereğlisi LNG Terminal storage capacity increase from 225,000 to 415,000 cbm
- 2nd FPU for Sakarya Gas Field Phase III development under Construction
- Two new FSRU terminals in planning
- Ceyhan Oil Terminal Storage Capacity increase from 11.1 to 45 mill barrels until 2031

RECENT REGIONAL OIL&GAS PROJECTS OF TPAO

- Shafag-Asiman nat. gas exploration and development in AZE; BP(35%), SOCAR(35%), TPAO (30%),
- Khan Tervel Block 1-26 exploration in BGR; SHELL(42%), TPAO(33%), OMV(25%),
- Kirkuk oilfields redevelopment and production in IRQ; BP(43%), ConocoPhillips(42%), TPAO(15%),
- Block O7 deepwater exploration in LBY; Repsol(40%), TPAO(40%), MOL(20%),
- Onshore Sirte Basin C3 block exploration in LBY, Repsol(60%), TPAO(40%),
- Four offshore blocks 10,000 km 2D seismic in LBY,
- Ultra deep off-shore exploration, 15,000 sqkm 3D seismic followed by Curad-1 well in SOM.



Source: ETKB

REGIONAL OIL & GAS INFRASTRUCTURE DEVELOPMENTS

- Trans-Caspian Natural Gas Pipeline TKM-AZE again in discussion,
- TUR-SYR Natural Gas pipeline completed, AZE gas flows to Aleppo,
- BOTAŞ contributes to Absheron Phase II development, 2.25 bcm/y, 15 years contract,,
- Syria-Türkiye crude oil pipeline project,
- Extension of Kirkuk-Ceyhan crude oil pipeline to Basra,
- Qatar-Saudi Arabia-Jordan- Syria-Turkey natural gas pipeline project,
- Türkiye-Northern Cyprus bi-directional natural gas pipeline project.



SECOND REVIVAL OF QATAR-TÜRKİYE NATURAL GAS PİPELİNE ?

First desk study of this pipeline with an appr. length of 1,500 km project prepared in 1987,
Estimated cost of the project in1987 was appr. 4 bill USD, today over 10 bill USD,
First revival of the project was back in 2009, rejected by Syria's ruler Assad.



Source: Habertürk

Extension of Kirkuk-Ceyhan crude oil pipeline to Basra

Iraq plans two new crude oil export corridors from Basra to the Turkish border and Baniyas(SYR),
Basra-Haditha pipeline; 685 km,2.25 mill barrels/d (under implementation),
Haditha-Turkish border; 550-600 km (in planning),
Haditha-Baniyas; 450 km (in planning).



Source: Bloomberg

Thank you

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