Implementation of the Greek Exclusive Economic Zone (EEZ) and Its Financial and Geopolitical Benefits.

Impact on Planning the Energy Future of the European Union

by
Anthony Foscolos

BY IMPLEMENTING THE GREEK EEZ

A. We can exploit our Hydrocarbon Resources which are located offshore south of Crete. These resources are by far more than those located in Western Greece. The net benefit to the Greek economy will amount to $ 437 billion or roughly 302 billion Euros

THUS ERADICATING GREECE'S DEBT

B. A pipeline originating from either Cyprus or Israel can transfer through the Greek EEZ the surplus natural gas which is already found (2.5 tcm) and yet to be to be found (15.1 tcm) to Western Europe.

THIS WILL ENABLE EUROPE TO MEET ITS FUTURE ENERGY DEMAND

Figure 1. Exclusive Economic Zones of Greece and Neighboring Counties Based upon the International Law of the Sea (UNCLOS), Montego Bay, Jamaica, 1982, Mazis, 2011

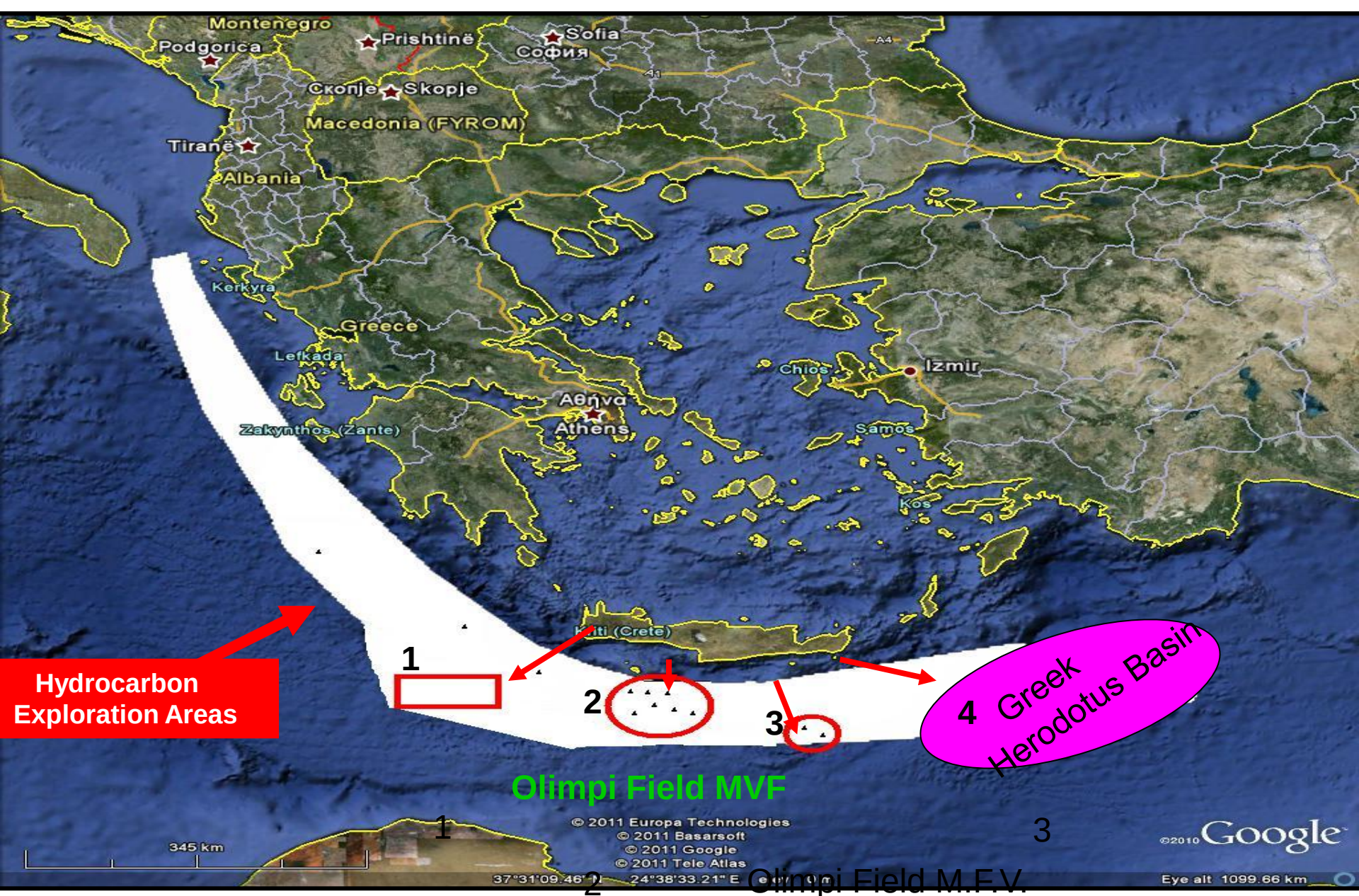


Figure 2. Areas worth exploring for hydrocarbons. 1 Southwest of Gavdos island. 2 Olimpi Mud Flow Volcanoes field. 3 United Nations Rise Mud Flow Volcanoes Field. 4 Herodotus Basin

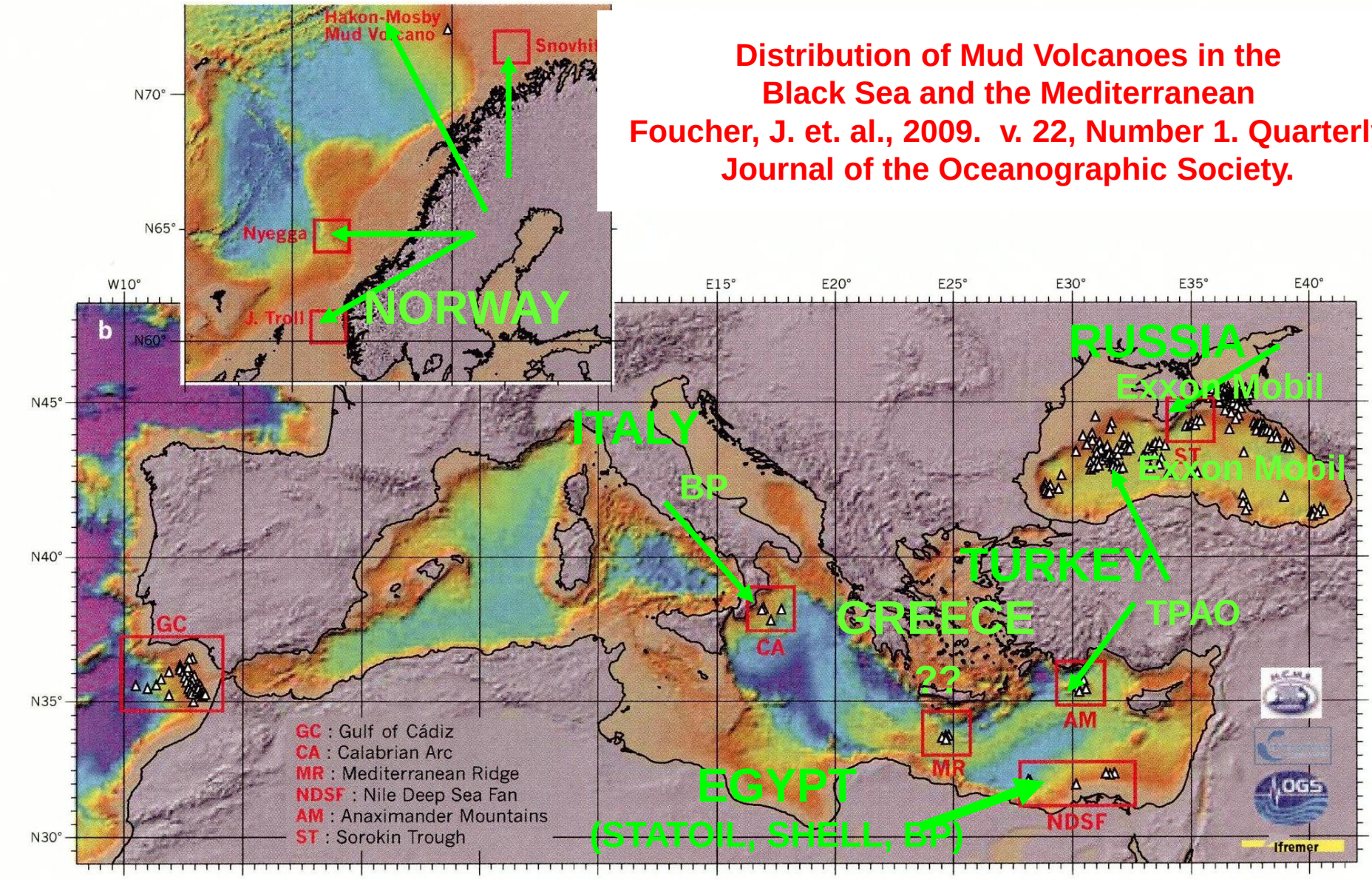
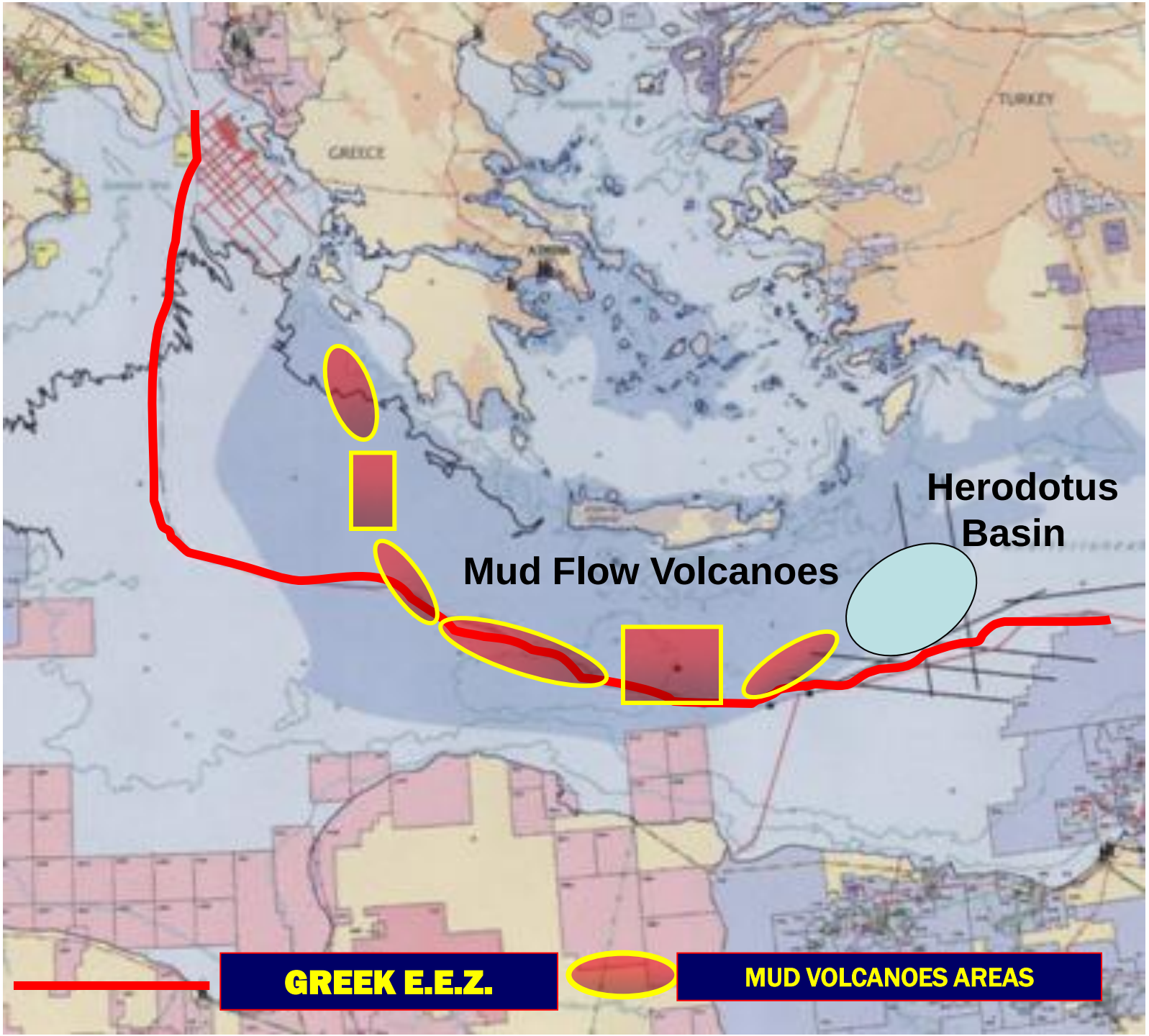


Figure 3. Distribution of Mud Volcanoes in the North Atlantic, Black Sea and the Mediterranean, Foucher, et. al., 2009. Green arrows indicate hydrocarbon exploration activities around Mud Volcano Fields.


GREECE
TURKEY
Herodotus Basin
Mud Flow Volcanoes
GREEK E.E.Z.
MUD VOLCANOES AREAS

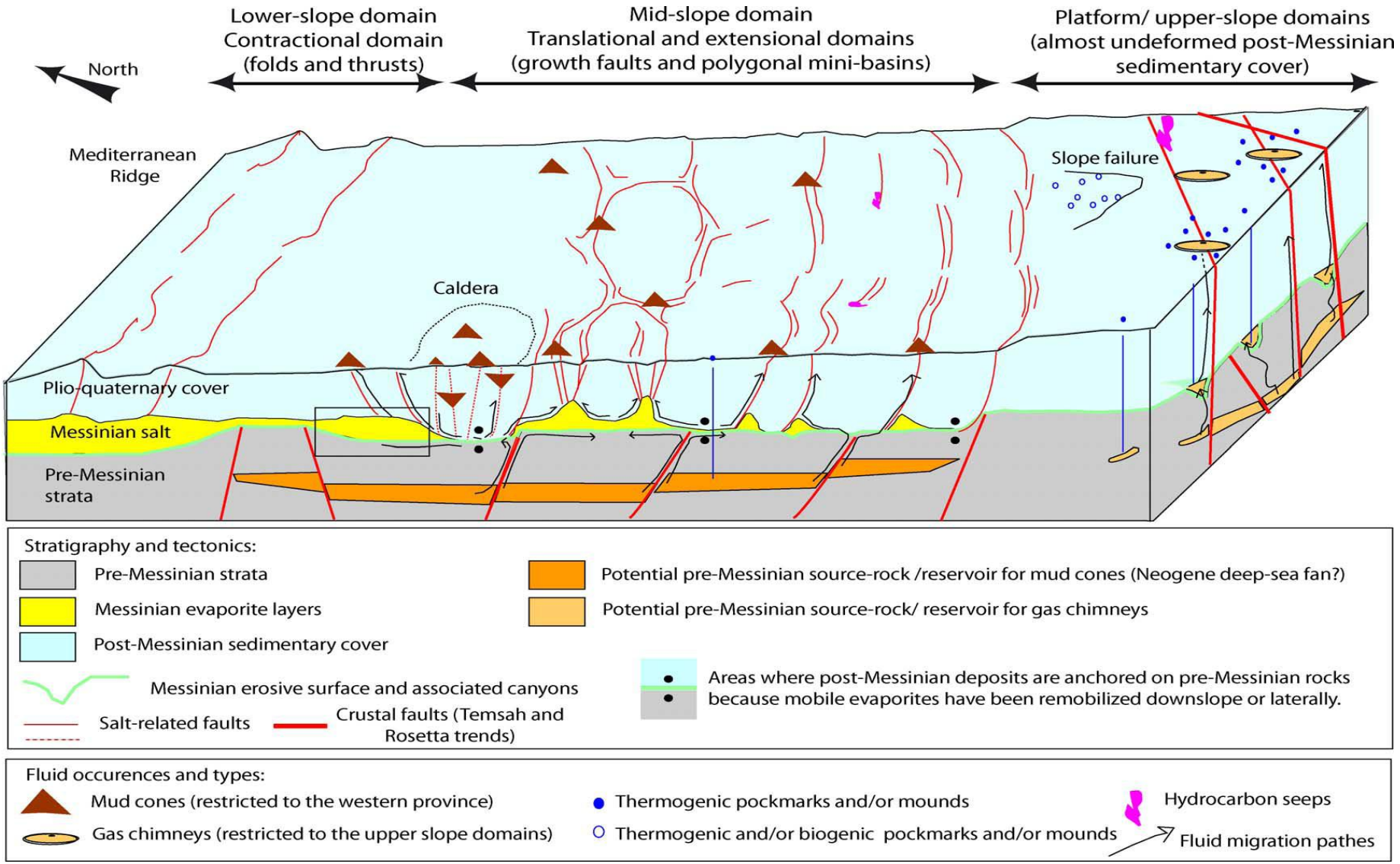
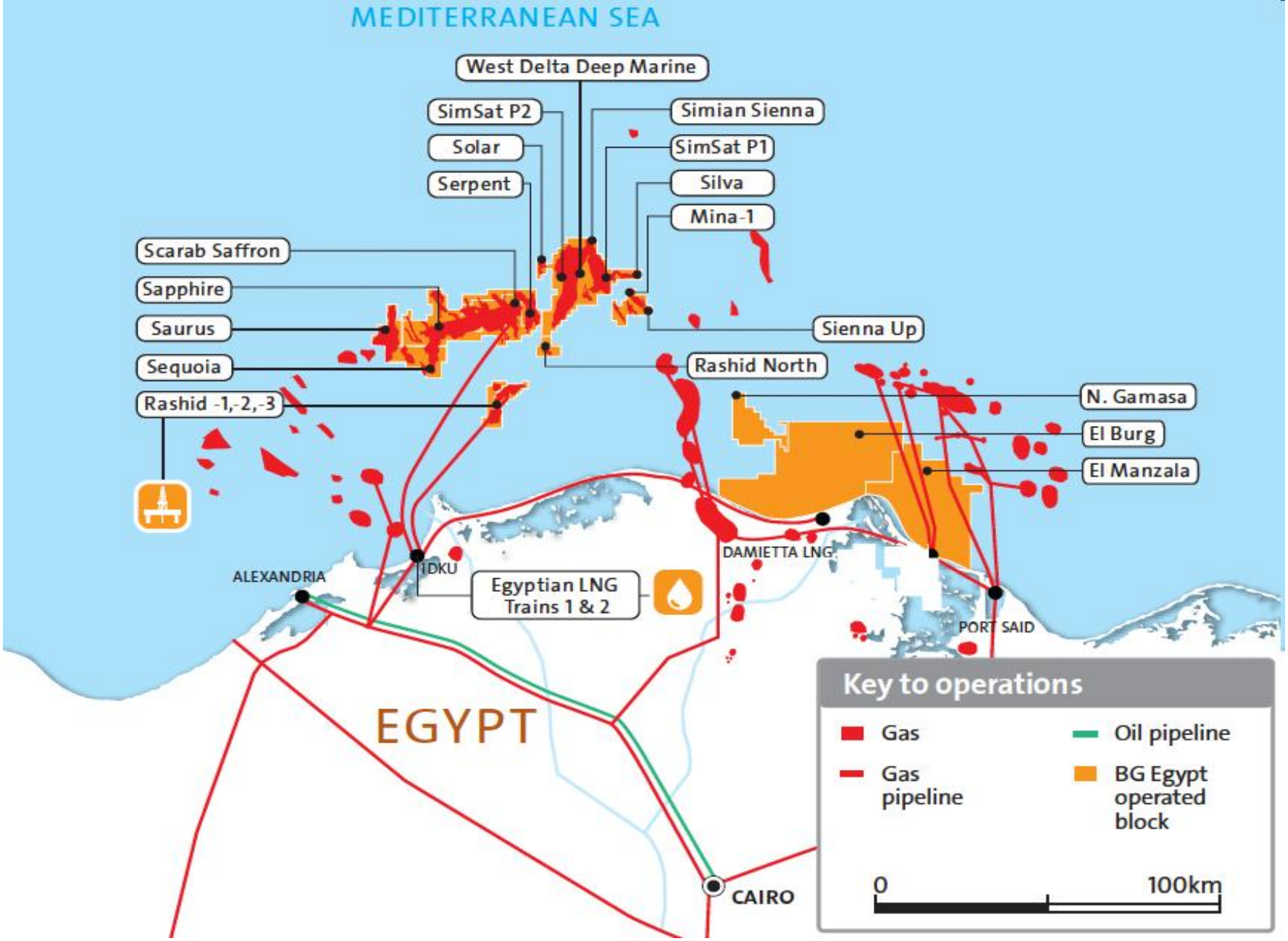


Figure 35. Active Mud Flow Volcanoes (brown triangles), Gas chimneys (brown discs), Thermogenic Pockmarks and Mounds offshore Southern Crete. The pre-Messinian source rocks/ reservoir for the mud cones (brown), are highly visible as well as the reservoir/source for the gas chimneys (light brown), are also visible, Loncke et al., 2004,



Εικόνα 29. Κατανομή των υπεράκτιων κοιτασμάτων φυσικού αερίου στον Κώνο του Νείλου, Neftegaz, EU, 2010 Rigzone, 2010

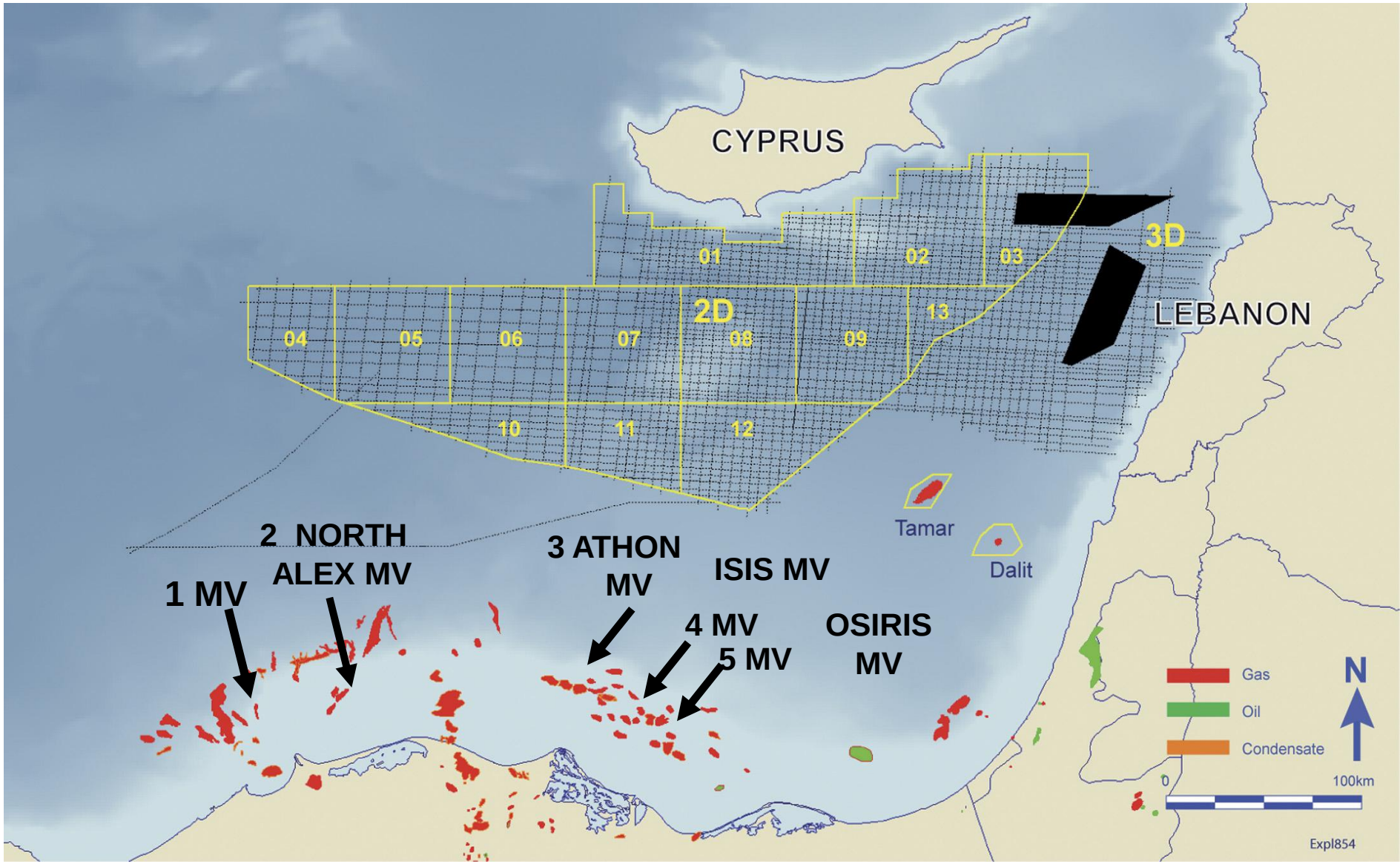


Figure 30. Location of Active Mud Flow Volcanoes (MV) in relation to the natural gas deposits in the Nile Cone. offshore Egypt.

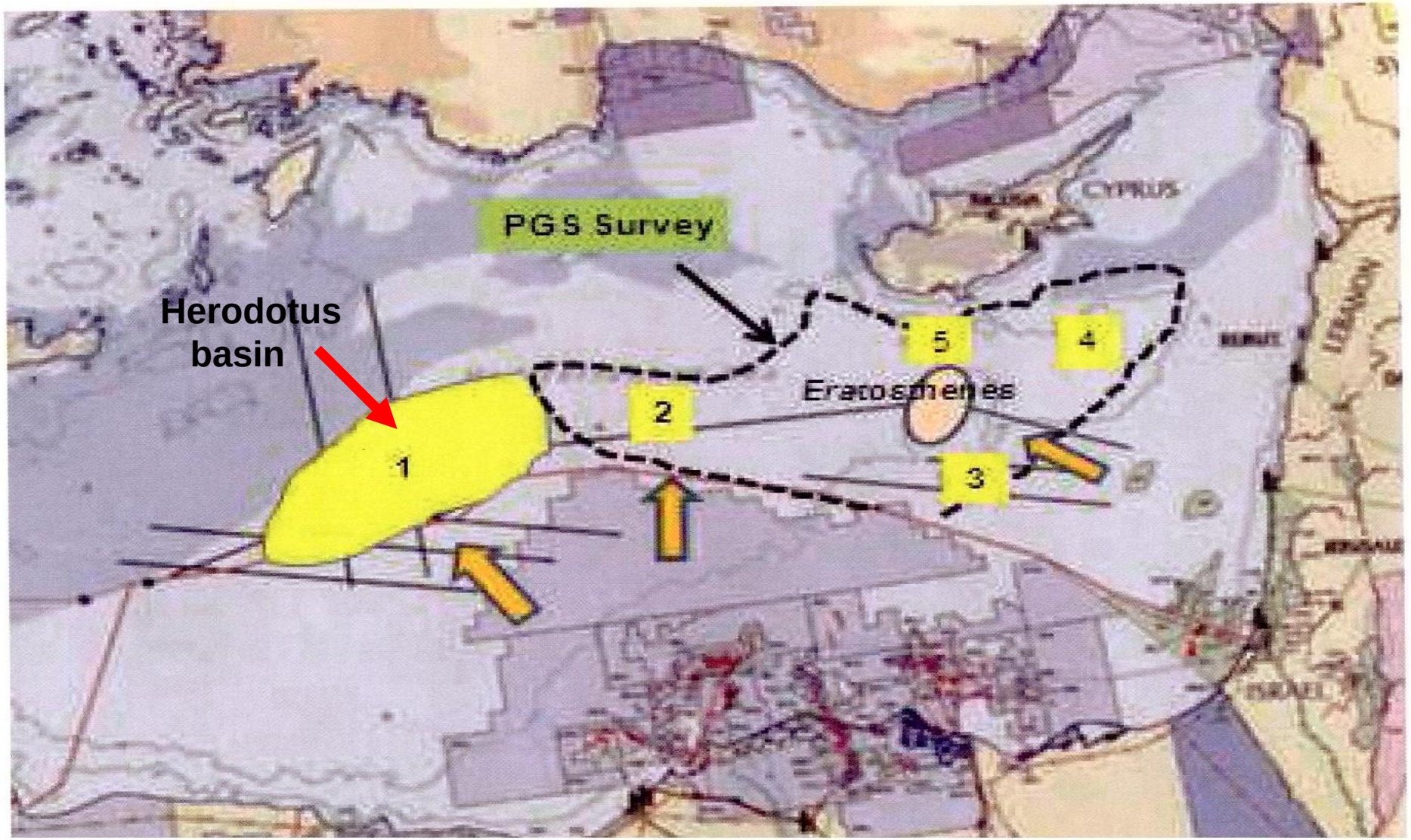


Figure 6. Potential hydrocarbon areas offshore Cyprus and the Greek Herodotus Basin, after IFP (Institute Francais du Petrole), Bruneton et al., 2009. Overview on the Hydrocarbon potential of the East Mediterranean Deep Offshore: Perpectives for Greek exploration. Map from BEICIP/ FRANLAB

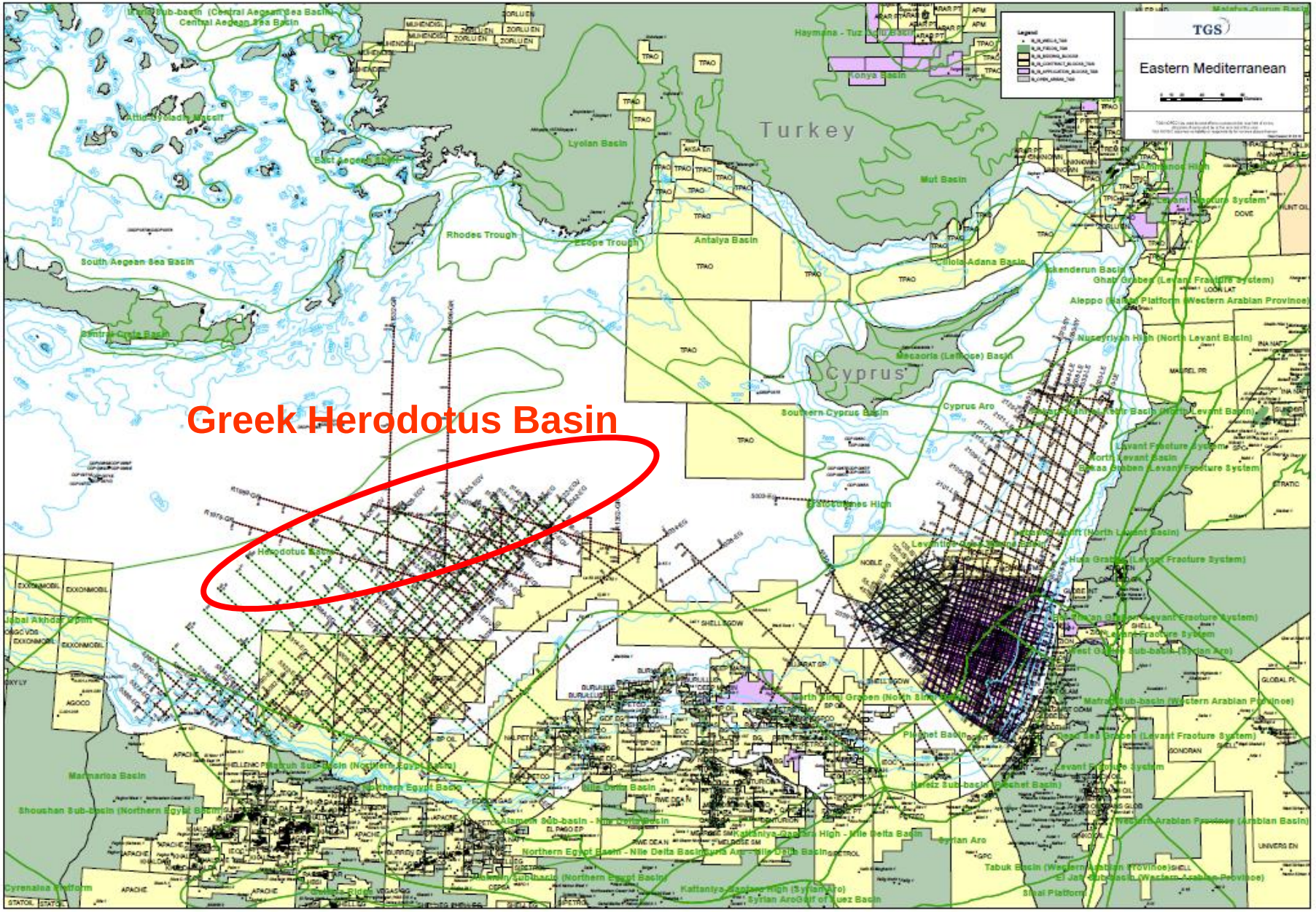


Fig.22: Geophysical survey by TGS-NOPEC, 2010

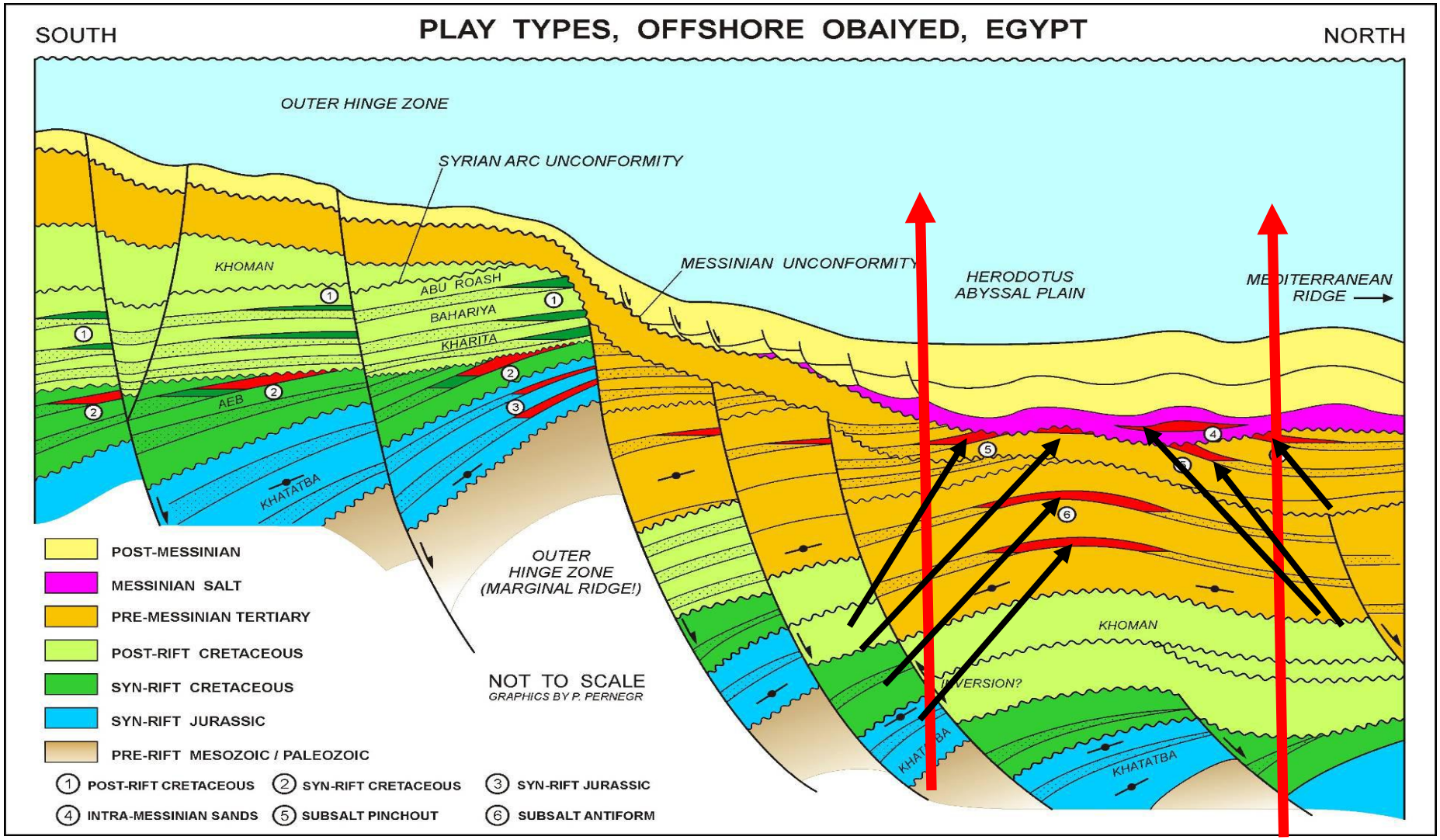


Figure 7. Herodotus Basin with 7 tectonic and structural hydrocarbon traps, Krois et al., 2009

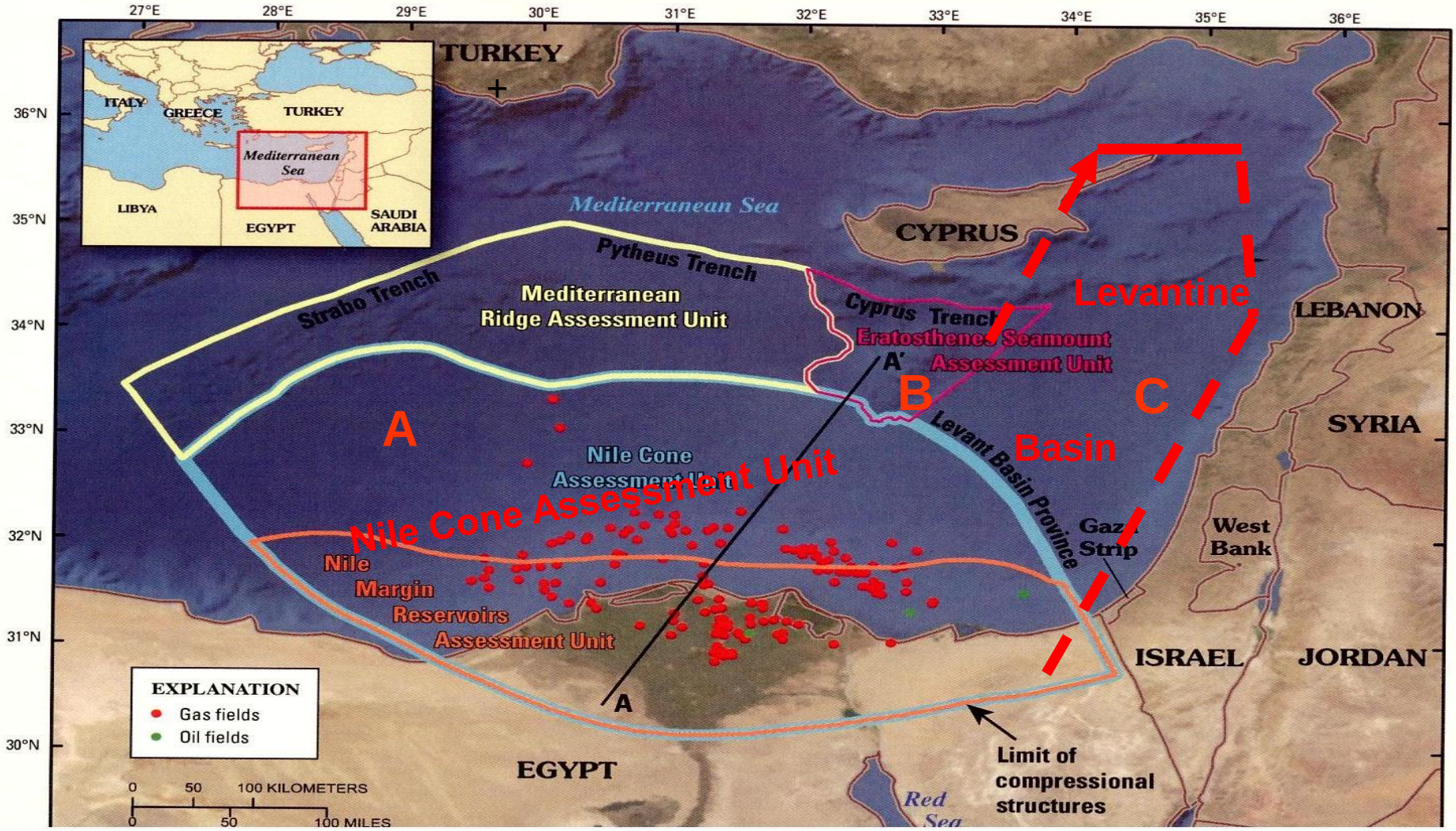


Figure 19. Location of four assessment units in the Nile Delta Basin Province in the eastern Mediterranean. (Map not definitive for political boundaries.) USGS image. A+ B, Potential 223 trillion cubic feet of natural gas(6.31 trillion M^3). C, Potential 122 trillion cubic feet of natural gas (3,45 trillion M^3). USGS Assessment 2010.

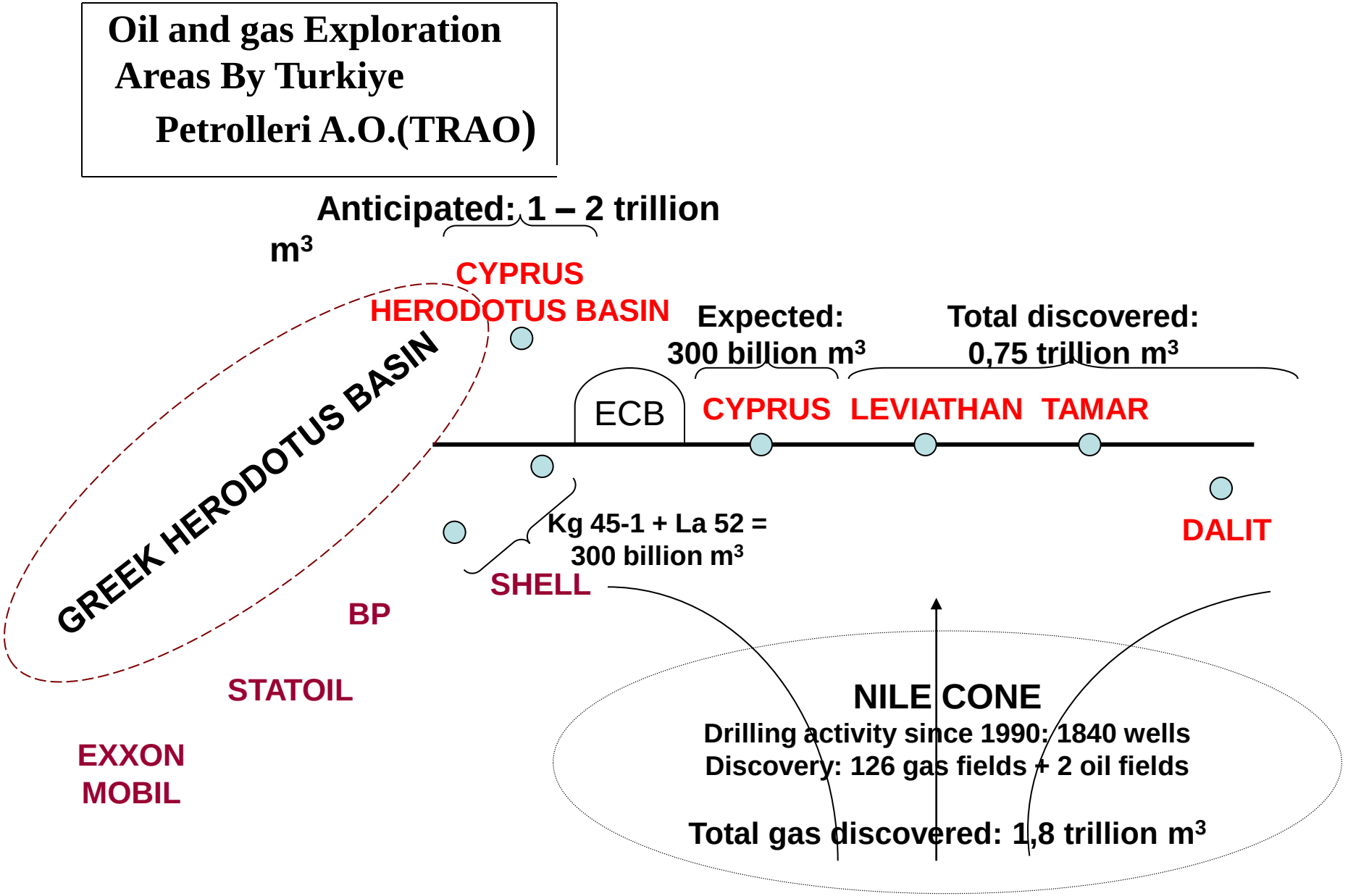


Figure 5. Oil Companies Exploring and Exploiting around the Greek Herodotus Basin. Blue dots indicate discovered natural gas fields

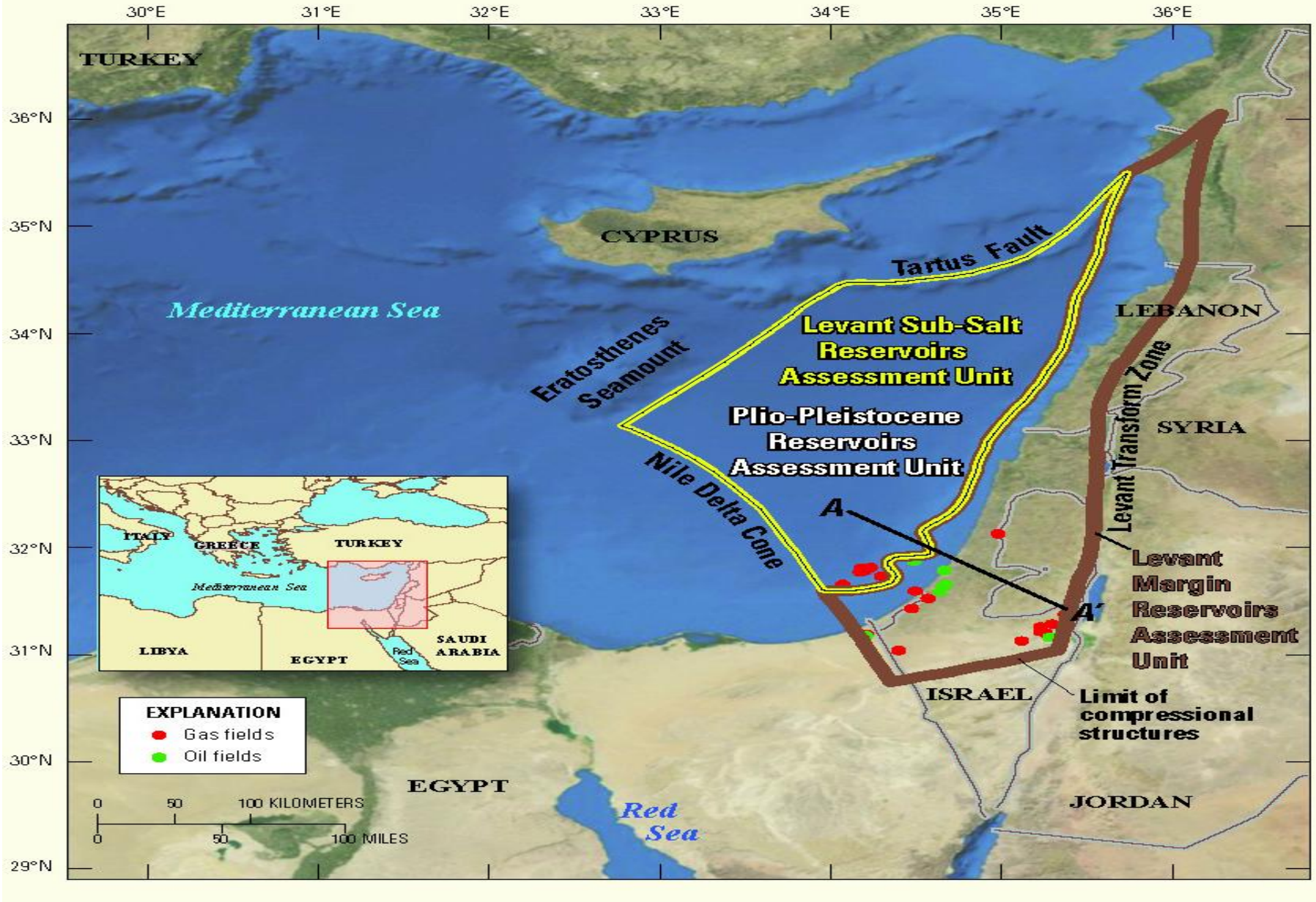


Figure 7. The Levantine Basin with its recent oil and gas discoveries. Assessed potential for further discoveries of natural gas 122 tcf and oil 1,7 billion barrels, USGS Technical Report, 2010

Economic Benefits for Greece based upon the exploitation of 1,5 tcm and 2 tcm natural gas deposits occurring in Olimpi field and Greek Herodotus Basin, respectfully. Calculations based on 25 years of exploitation.

1. Substituting imported oil with locally produced Natural Gas (0,55 tcm) — $ 209.4 billion

2. Substituting imported Natural Gas from Russia with locally produced Nat. Gas (7.0 bcm/year X 25 years = 0, 175tcm) — $ 14,4 billion

3. By exporting the surplus Natur. Gas, roughly 2,775 tcm, to Europe at $7,5/ Gj — $ 145,7 billion

4. Creating 100 thousand jobs in the Primary and 200 thousand jobs in the Secondary Sectors and taxing their income at 30% — $ 67,5 billion

TOTAL $ 437 BILLION OR 302 BILLION EUROS

PROVEN, HIGHLY PROBABLE AND PROBABLE NATURAL GAS RESERVES OF EASTERN MEDITERRANEAN (OFFSHORE) IN TRILLION CUBIC METERS

EEZ OF COUNTRIES	PROVEN OFFSHORE	HIGHLY PROBABLE	50% PROBABLE
EGYPT	1.8		6.3[1]
ISRAEL	0.7		1.8[1]
CYPRUS		0.3	2.0[2]
SYRIA+ LEBANON			1.2[1]
GREECE/CRETE			3.5[3]
TOTAL	2.5	0.3	14.8

[1] USGS Technical Report, 2010.. [2] BEICIP/F3.RANLAB and PGS [3] Relating similar natural gas findings with number of MVF and similarities of the Herodotus basin portions belonging to Egypt and Cyprus to the one belonging to Greece

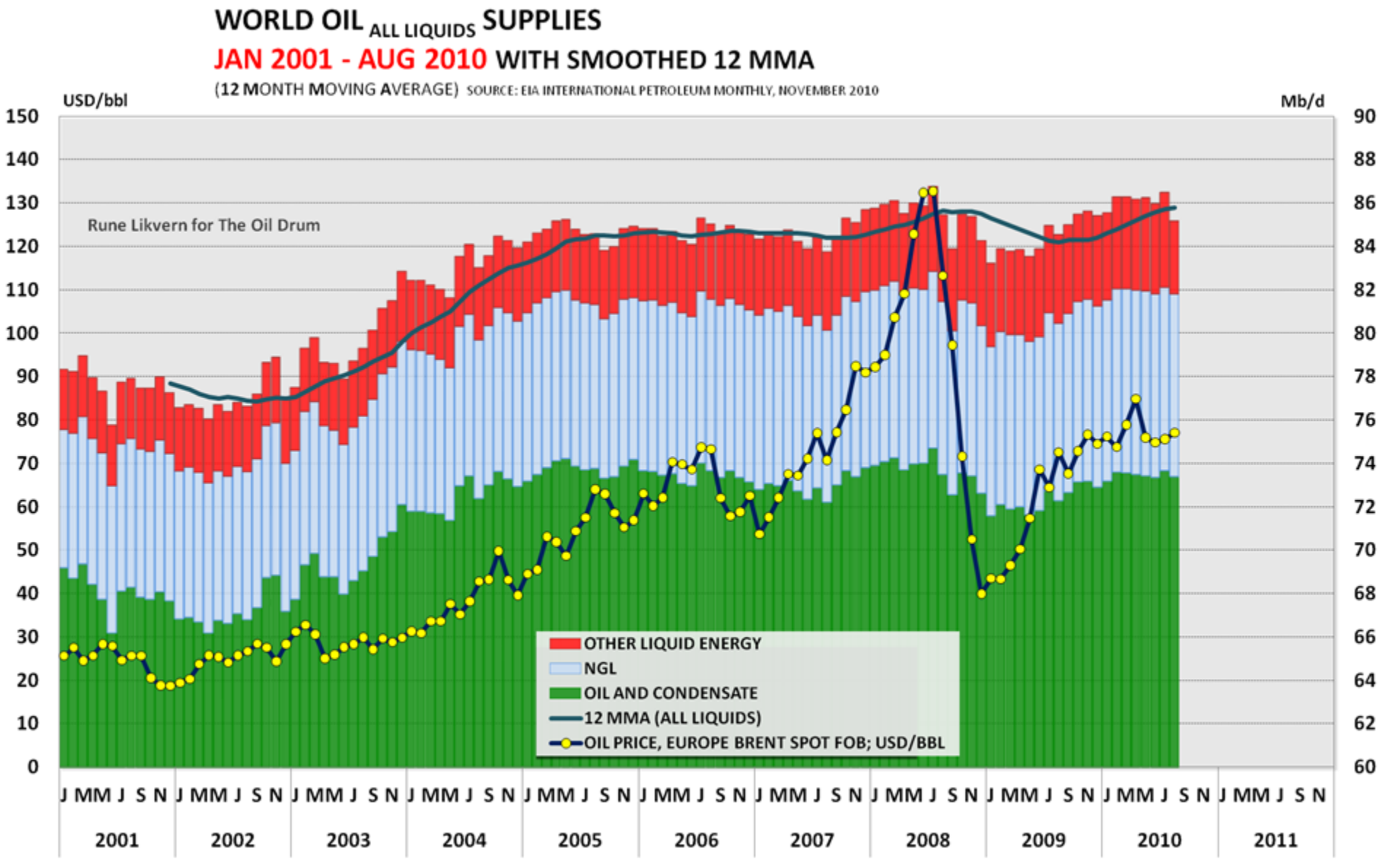


Figure 8. Global Oil Supplies as reported by EIA's International Petroleum Monthly, by Likvern, R., November 2010 Oil Drum, Europe

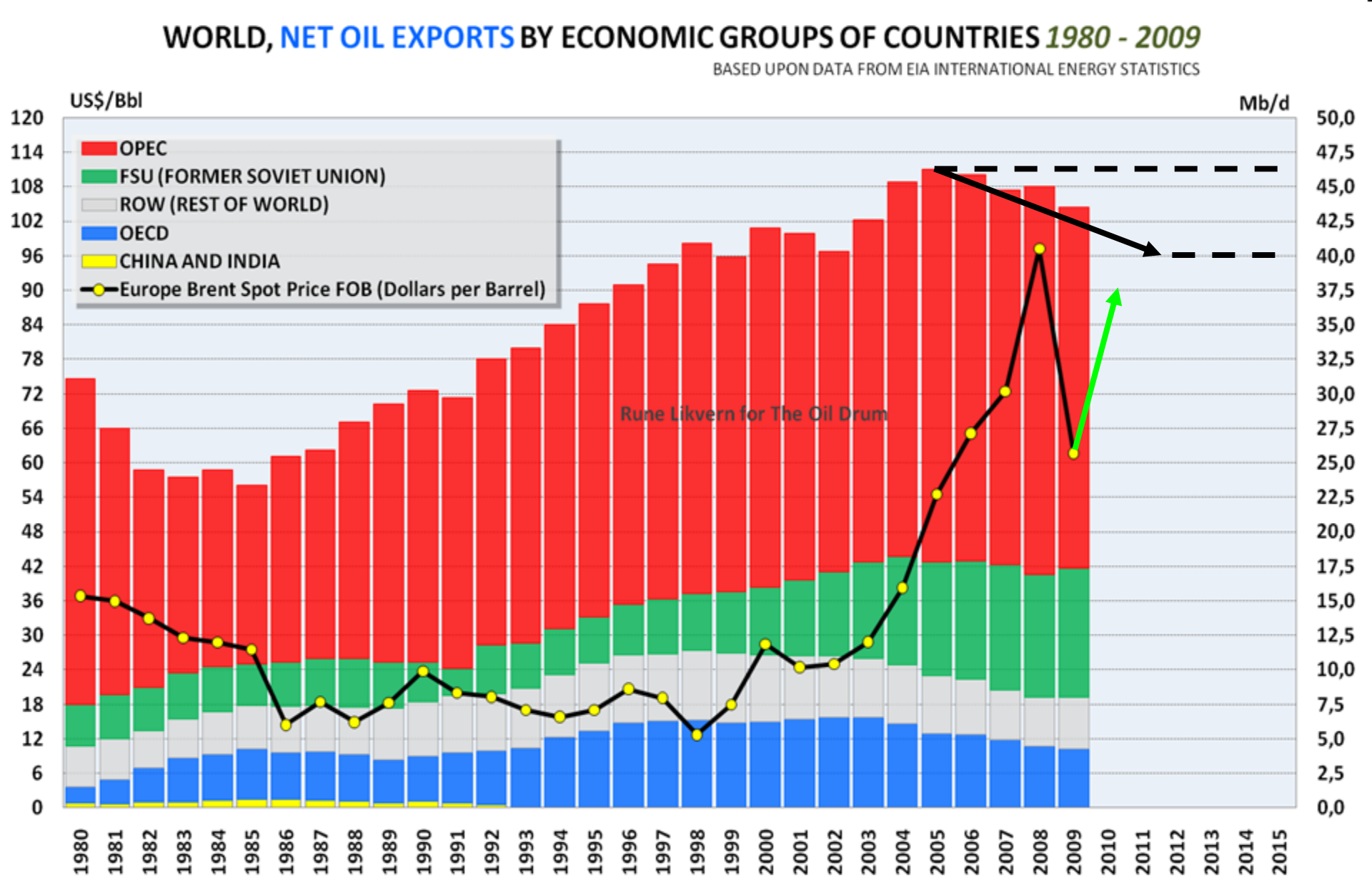


Figure 9. Trends in World Oil Supply/ Consumption and Net Exports/Imports, Likvern, R., September 2010 Oil Drum Europe

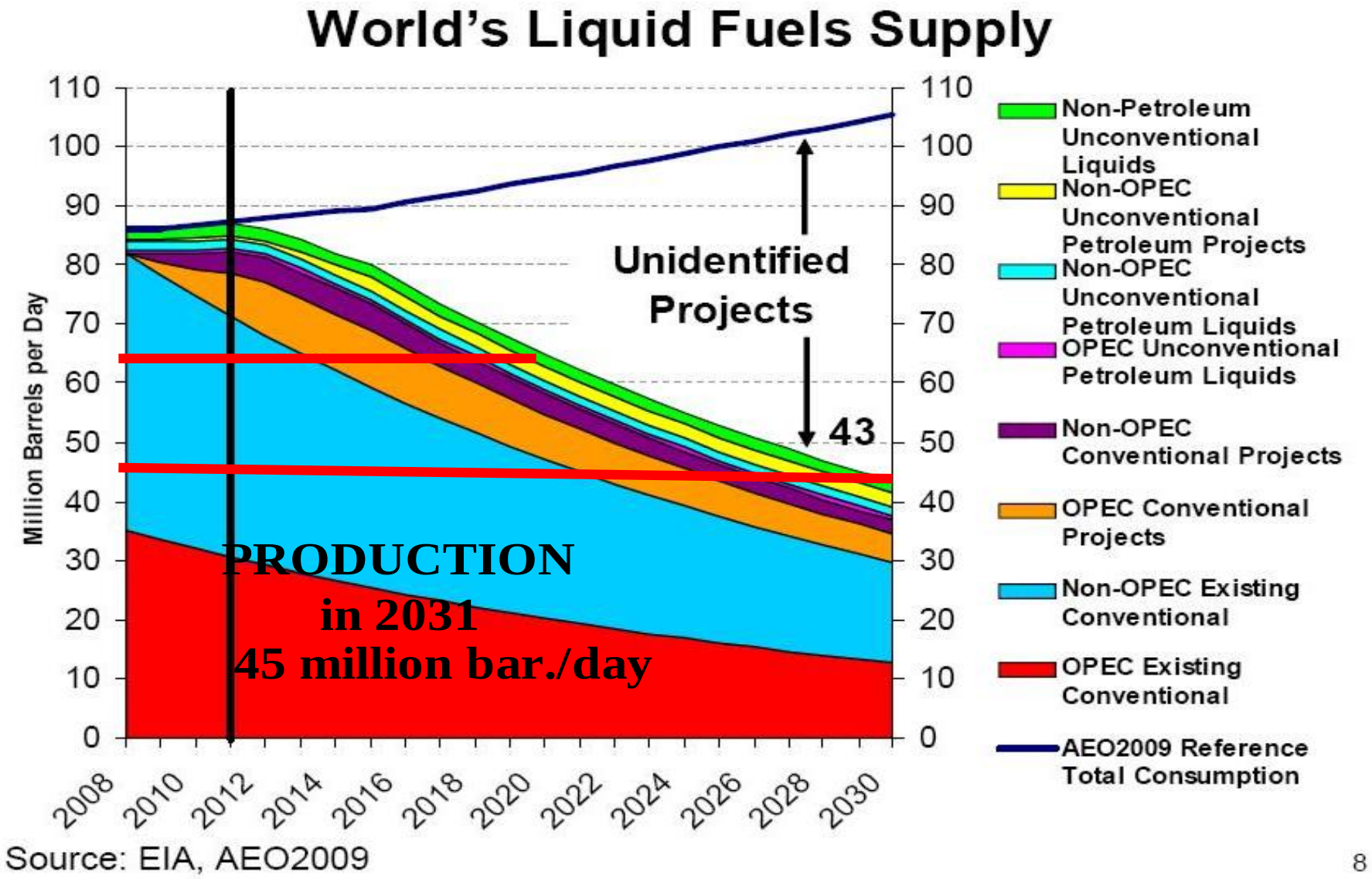


Figure 10. World's Liquid Fuels Supply by EIA, 2009

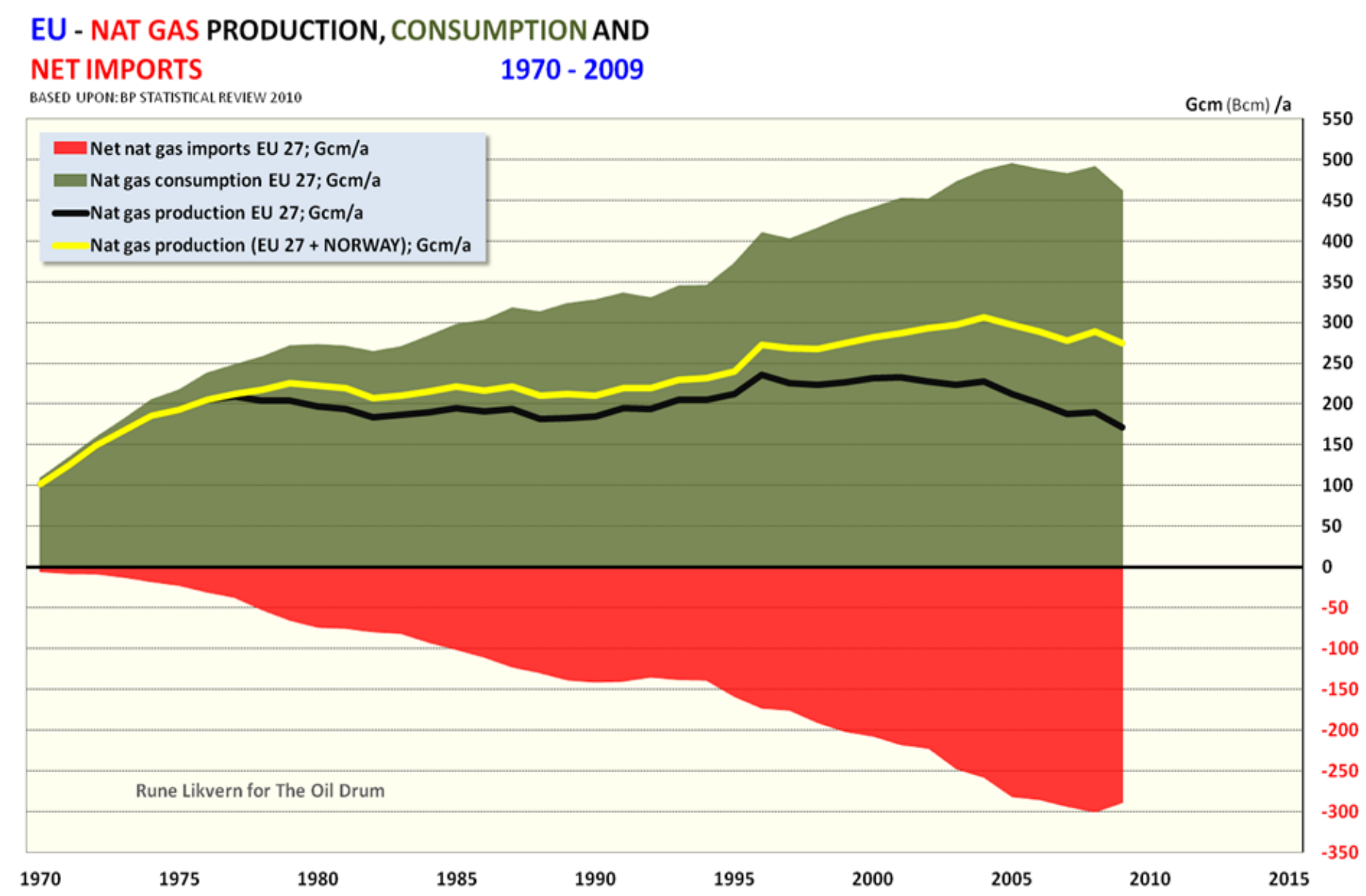


Figure 11. Natural Gas Production, Consumption and Net Imports of the European Union, Likvern, R., August 2010. www.energybulletin.net/node/53656- Cashed and in August 3, 2010 the Oil Drum

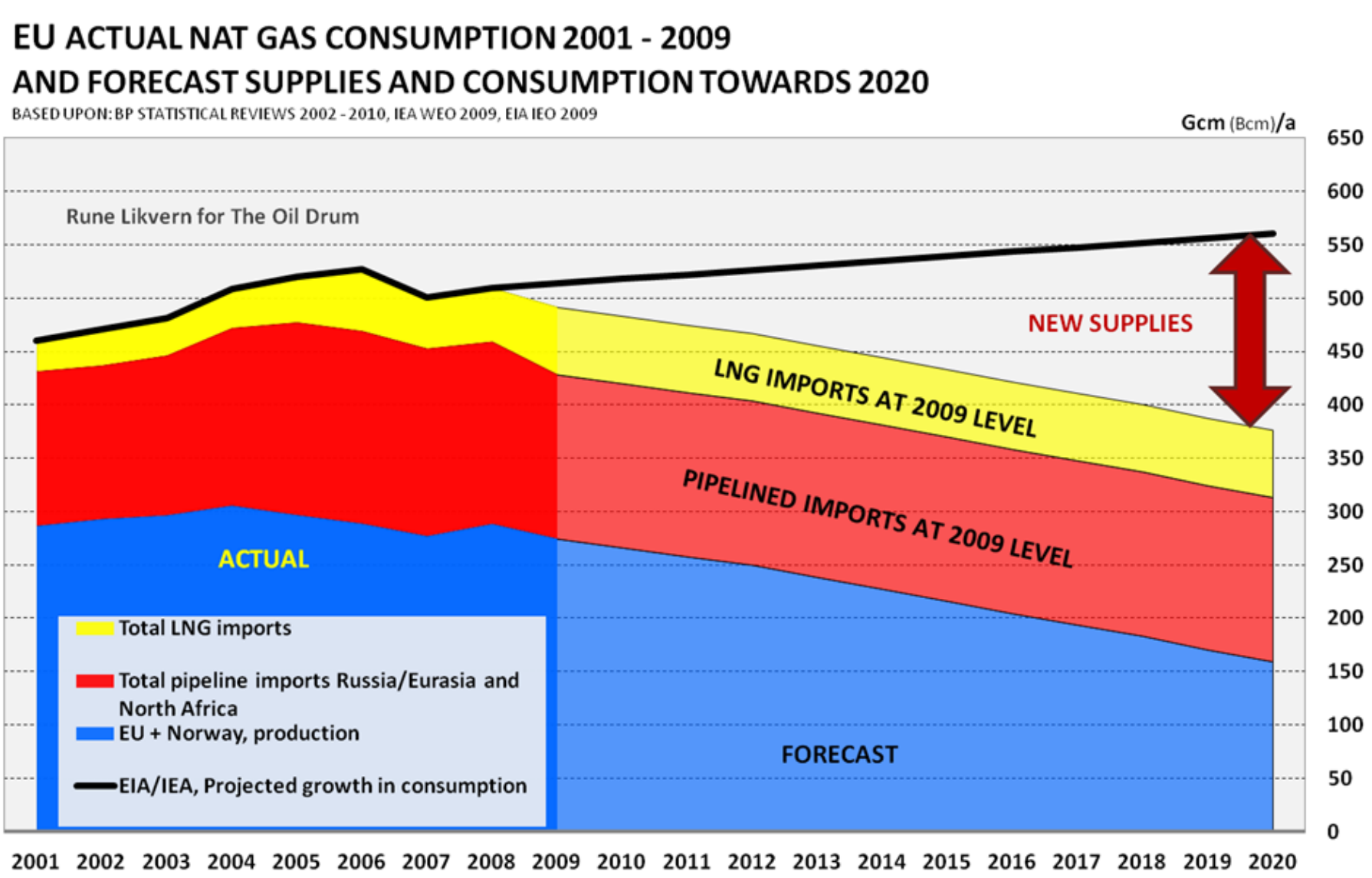
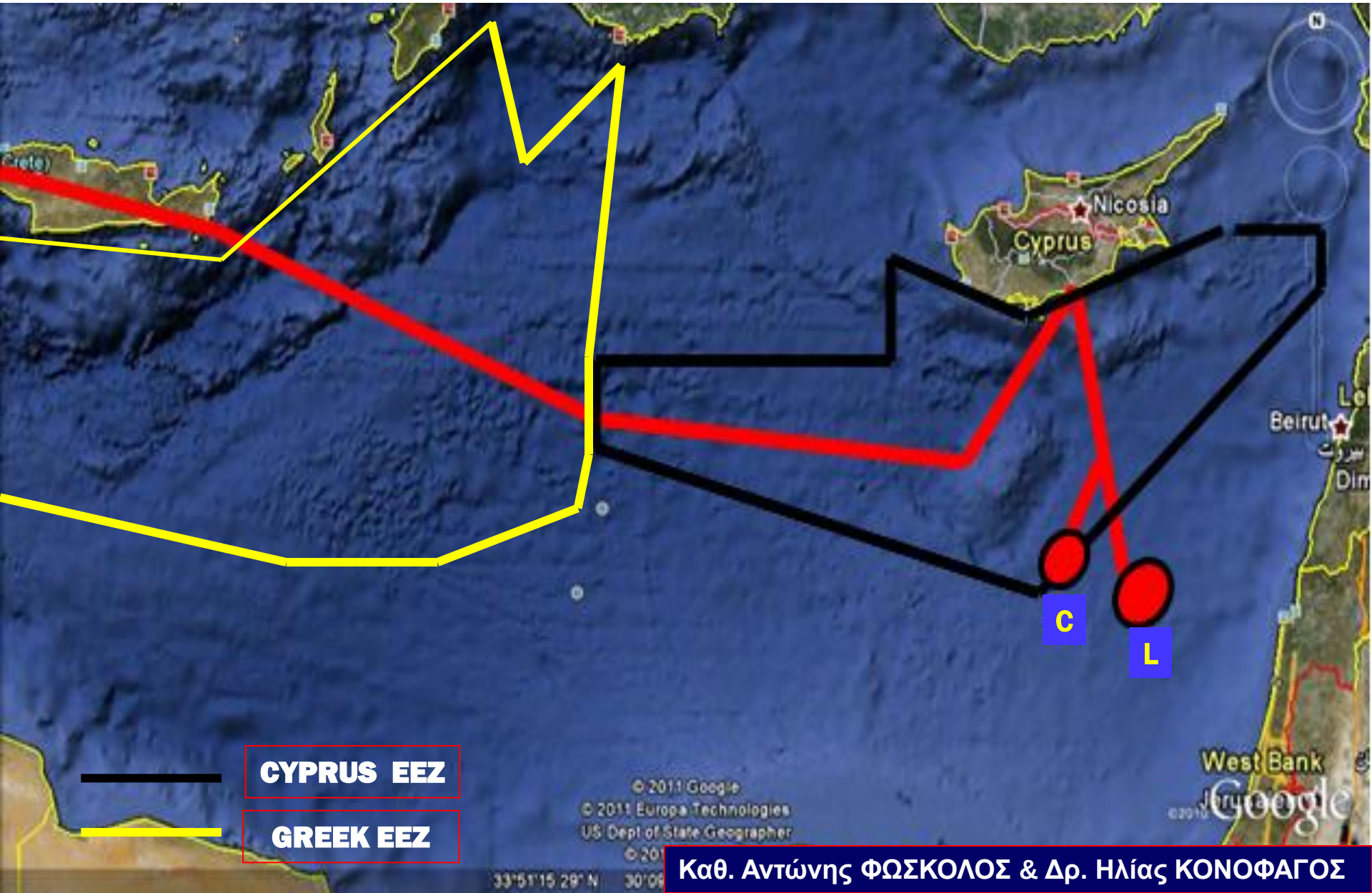


Figure 13. Actual Natural Gas Consumption between 2001 and 2009 of the European Union. Forecast Supplies and Consumptiom towards 2020, Likvern, R. August 2010. www.energybulletin.net/node/53656- Cashed and in August 3, 2010 the Oil Drum

HENCEFORTH TO COVER THE HUGE EUROPEAN ENERGY DEFICIT WHICH AMOUNTS TO 845 BILLION CUBIC METERS PER YEAR NATURAL GAS RESOURCES FROM EASTERN MEDITERRANEAN AND CRETE HAVE TO FIND THEIR WAY TO THE EUROPEAN MARKET EITHER BY LNG OR BY CONSTRUCTING 1-2 NATURAL GAS PIPELINES.

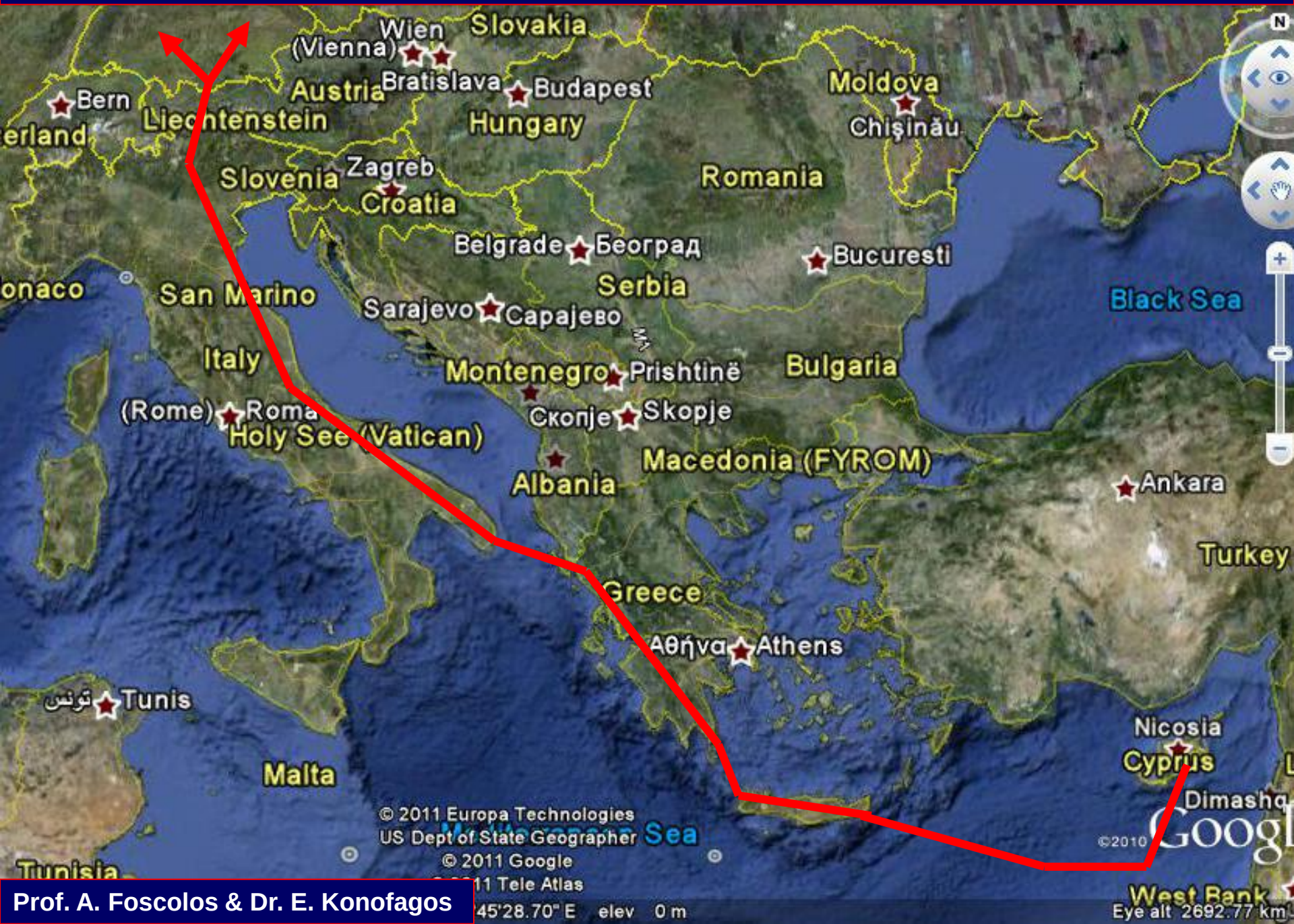
IT MUST BE UNDERSTOOD THAT NEITHER RUSSIA NOR NORTH AFRICA CAN SATISFY THE EXCESS ENERGY NEEDS THAT EUROPE WILL HAVE AFTER 2020

PIPELINE EXPORT ROUTE FROM EAST MEDITERRANEAN GAS FIELDS



Καθ. Αντώνης ΦΩΣΚΟΛΟΣ & Δρ. Ηλίας ΚΟΝΟΦΑΓΟΣ

PIPELINE EXPORT ROUTE FROM ISRAEL-CYPRUS TOWARDS EUROPE



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Italy
Prishtinë
Podgorica
Sofi
Bulgaria
Skopje
Holy See (Vatican)
Tiranë
Albania
Macedonia (FYROM)
Greece
Athens
Malta
Mediterranean
Tripoli
I
II
III

Figure 1. Exclusive Economic Zones of Greece and Neighboring Counties Based upon the International Law of the Sea (UNCLOS), Montego Bay, Jamaica, 1982, Mazis, 2011

ONE WONDERS IF CORNUCOPIA EXISTS OFFSHORE THE ISLAND OF CRETE……OIL COMPANES WILL FIND OUT


THANK YOU