IOANNIS DIAKOS

Course: **Security and Stability in Southeast Europe**

Professor Dr. Panayiotis Tsakonas

Issue: **Energy Security in Southeast Europe and the broader Mediterranean**

SEE Studies 2024-25

Introduction

➤ Definition of Energy Security

Energy security refers to ensuring that a country or region has stable, uninterrupted, and affordable access to energy sources. It is fundamental to the functioning of the economy, industry, and the quality of life of citizens. During periods of crisis or geopolitical tensions, energy security can be threatened.

➤ Strategic Importance of the Region

Southeast Europe and the Mediterranean serve as significant energy crossroads, connecting energy-producing countries (Middle East, Caucasus, North Africa) with consuming countries (EU). This makes the region critical for Europe's overall energy stability.

➤ Presentation Objective

This presentation aims to examine the factors affecting the region's energy security, the infrastructures and international collaborations developed, and the challenges that countries in the area face.

Geopolitical Significance of the Region

➤ Crossroads of Energy Flows

The region hosts significant energy transport routes, such as natural gas and oil pipelines. Pipelines connecting Asia and the Eastern Mediterranean with the EU traverse this area, making it an energy "corridor."

➤ Sensitive Geopolitical Balance

Many countries in the region have historical disputes or conflicting relationships (e.g., Greece–Turkey, Israel–Lebanon). Geopolitical tensions can cause instability and disrupt energy flows.

➤ Impacts of Crises

Armed conflicts in Syria, Libya, and recently Ukraine have negative consequences on supply and energy prices, highlighting the importance of energy self-sufficiency and source diversification.

Energy Sources and Evolution

➤ Natural Gas – Oil – Renewable Energy Sources (RES)

The primary energy sources are oil and natural gas, while Renewable Energy Sources (RES) are continuously increasing (solar, wind, hydroelectric). Countries are increasingly investing in "green" energy.

➤ Transitional Period

The region is undergoing an energy transition, striving to reduce dependence on fossil fuels and invest in clean energy forms, such as solar and wind.

➤ Increase in LNG and Interconnections

Liquefied Natural Gas (LNG) offers flexibility in supply. Simultaneously, efforts are being made for energy interconnections between countries, such as power lines or pipelines, to enhance collective energy security.

Share of Renewable Energy in Final Energy Consumption (2022) – Southeast Europe

- Albania: 44.1%
- Montenegro: 39.9%
- Croatia: 29.4%
- Serbia: 27.1%
- Romania: 24.1%
- Slovenia: 22.9%
- Greece: 22.7%
- Bulgaria: 19.1%
- Kosovo: 18.8%
- North Macedonia: 18.7%

Countries with the Highest Share of Electricity from Renewable Sources in 2022:

- Sweden: 83.3% (mainly from hydropower and wind energy)
- Denmark: 77.2% (mainly from wind energy)
- Austria: 74.7% (mainly from hydropower)
- Portugal: 61.0%
- Croatia: 55.5%
- Latvia: 53.3%
- Spain: 50.9%

In Greece, the share of electricity from renewable sources in 2022 was approximately 43%, surpassing the EU average.

On the other hand, countries with the lowest shares were:

- Malta: 10.1%
- Hungary: 15.3%
- Czechia: 15.5%
- Luxembourg: 15.9%

Main Sources of Renewable Energy in the EU in 2022:

- Wind energy: 37.5%
- Hydropower: 29.9%
- Solar energy: 18.2%
- Solid biofuels: 6.9%
- Other renewable sources: 7.5%

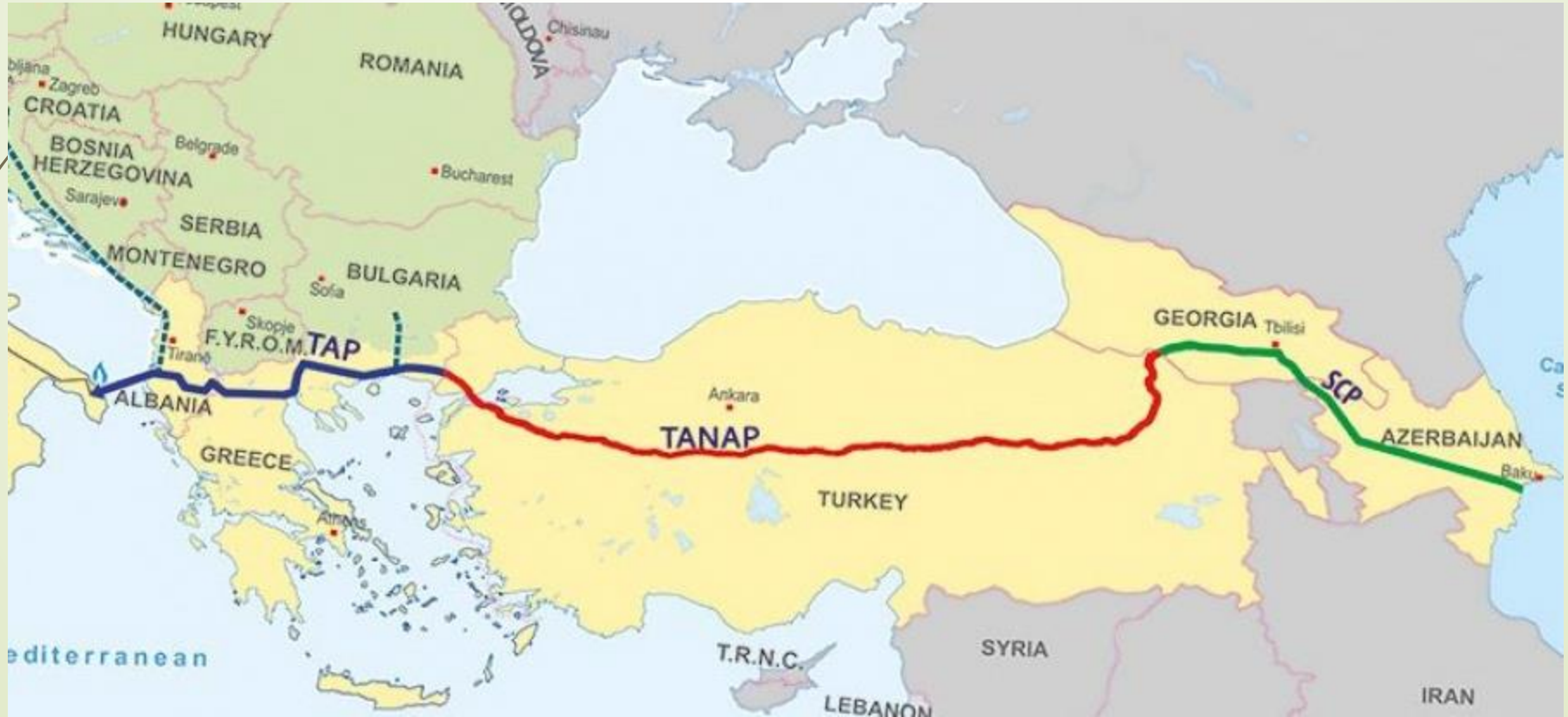
📌 EU average in 2022: 23%

These figures show significant variation between countries, largely influenced by each nation’s energy policies, investment levels, and available natural resources. Albania leads the region, thanks mainly to its hydropower capacity, while others like North Macedonia and Kosovo are still developing their renewable sectors.

Major Projects and Infrastructures

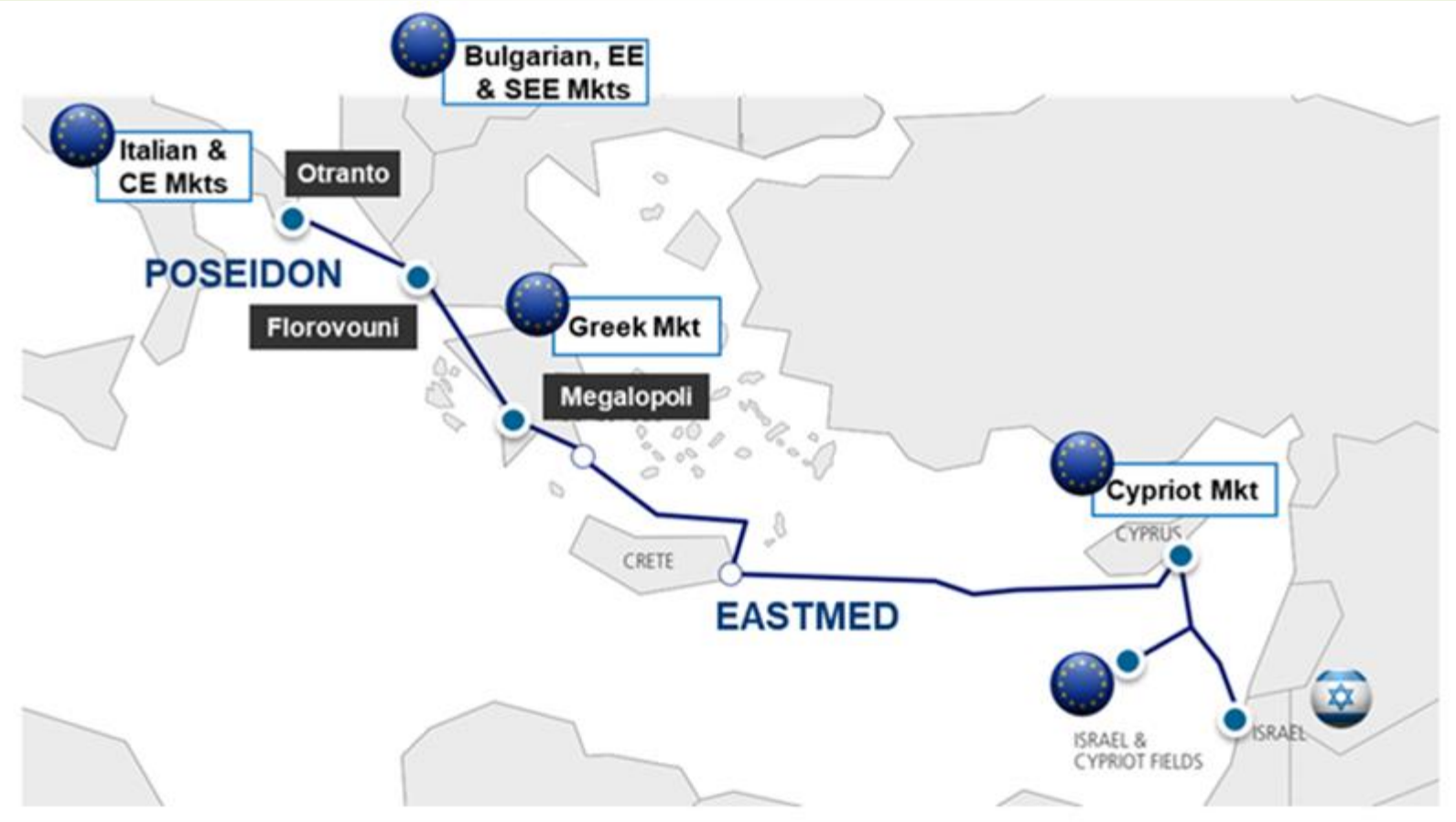
➤ Trans Adriatic Pipeline (TAP)

The Trans Adriatic Pipeline transports natural gas from Azerbaijan to Italy via Turkey, Greece, and Albania. It is crucial for Europe's energy diversification. Trans Adriatic Pipeline (TAP)+1Wikipedia+1



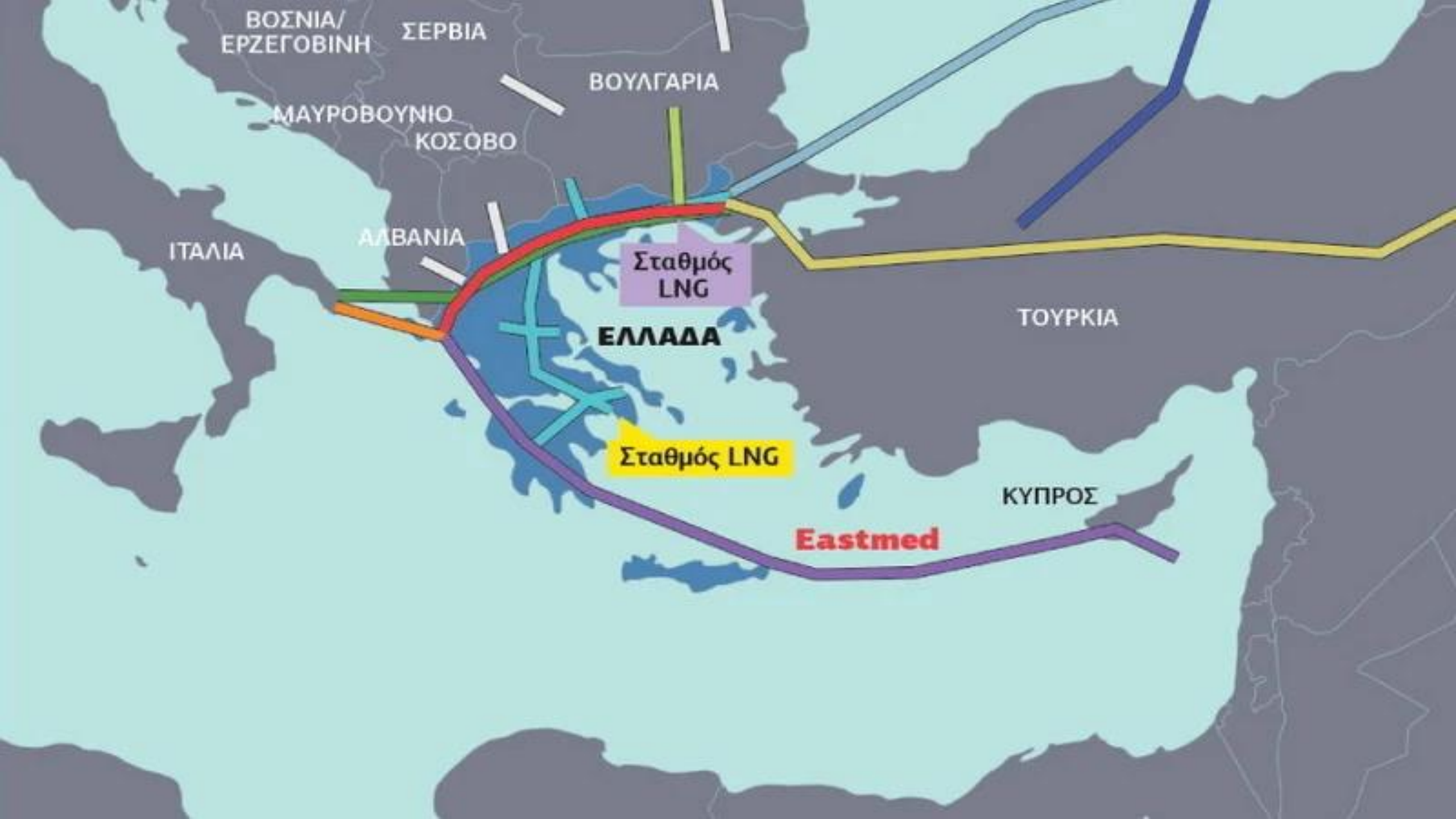
➤ EastMed

EastMed is a proposed pipeline that would transport natural gas from the Eastern Mediterranean deposits (Israel, Cyprus) through Greece to Italy and the rest of Europe. It aims to reduce dependence on third countries.



➤ Alexandroupolis FSRU

This is a floating storage and regasification unit (FSRU) for LNG, enhancing Greece's energy independence and supplying the Balkans. It holds strategic significance for the entire Southeast Europe. Global Energy Monitor


ΒΟΣΝΙΑ/
ΕΡΖΕΓΟΒΙΝΗ
ΣΕΡΒΙΑ
ΒΟΥΛΓΑΡΙΑ
ΜΑΥΡΟΒΟΥΝΙΟ
ΚΟΣΟΒΟ
ΑΛΒΑΝΙΑ
ΙΤΑΛΙΑ
Σταθμός
LNG
ΕΛΛΑΔΑ
ΤΟΥΡΚΙΑ
Σταθμός LNG
ΚΥΠΡΟΣ
Eastmed

Challenges and Risks

➤ Energy Dependence

Many countries in the region rely on imported energy, particularly from Russia. This makes them vulnerable to political pressures or price increases.

➤ Political and Military Tensions

Disputes over Exclusive Economic Zones (EEZ) between Greece–Turkey–Cyprus create risks and hinder deposit development.

➤ Climate Change

The need to reduce CO_2 emissions and adapt to new environmental conditions pressures for a rapid energy transition, requiring investments and expertise.

Role of the EU and Strategies

➤ Green Deal

The EU's Green Deal aims for climate neutrality by 2050. It includes a shift to RES, consumption reduction, and energy savings.

➤ REPowerEU

An initiative to reduce dependence on Russian natural gas through alternative sources, investments in RES, and increased energy efficiency. European Commission

➤ Interconnectivity

The EU funds energy integration projects so that member states can share energy resources and support each other during crises.ft.com+2Reuters+2The European Files+2

Role of Greece and Cyprus

➤ Greece as an Energy Hub

Greece's geographical position makes it a key passage for pipelines and LNG stations. By investing in RES and energy storage, it enhances its energy independence. Foreign PolicyThe European Files

➤ Cyprus and Deposits

Cyprus possesses offshore natural gas reserves in its EEZ. These serve as a source of development and cooperation with Israel and Egypt but also pose challenges due to Turkish claims. Reuters+1AP News+1

➤ Alliances

Greece and Cyprus participate in regional energy alliances, such as the EastMed Gas Forum, aiming for cooperation and peaceful exploitation of energy resources.

Conclusions

➤ Pivotal Moment

The energy transition and geopolitical challenges create a critical period for the region. Decisions made today will determine tomorrow's energy stability.

➤ Cooperation & Innovation

Regional cooperation, technological innovation, and smart policies are required to achieve sustainable energy security.

➤ Role of Greece – Responsibilities and Opportunities

Greece can become a model of green transition and an energy hub for Europe, provided it invests wisely and secures its international collaborations.

THANK YOU SO MYCH!