Energy Investment Outlook in SE Europe with Special Reference to Cyprus

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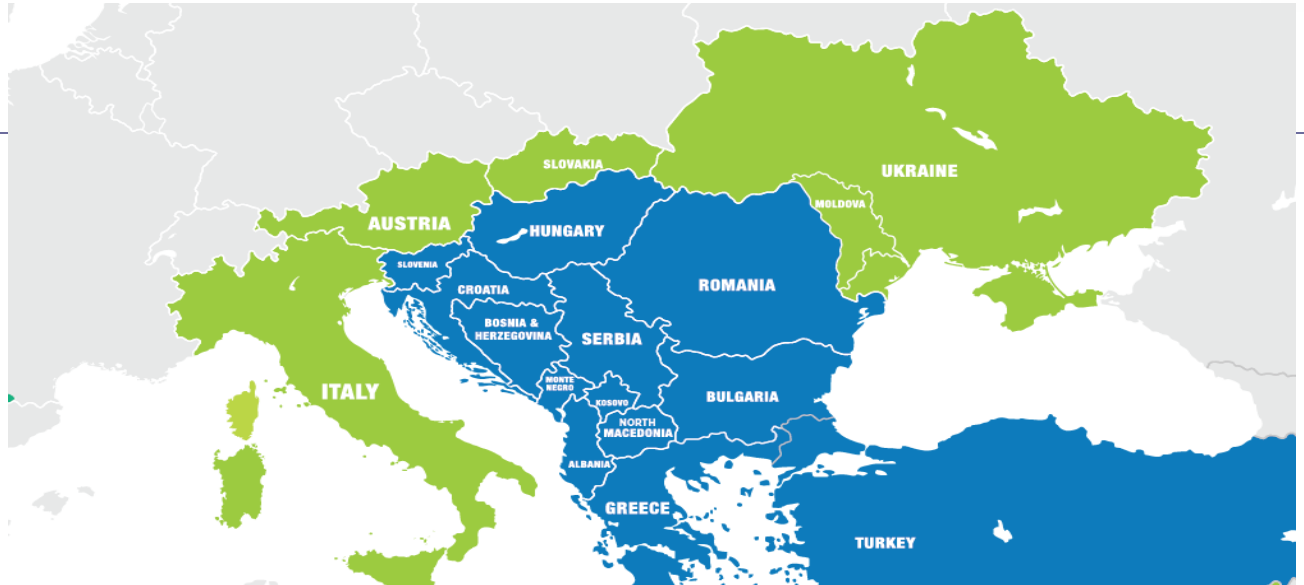
INSTITUTE OF ENERGY
FOR SOUTH EAST EUROPE

The SE European Region Defined



Core countries

- Albania
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Greece
- Hungary
- Israel
- Kosovo
- Montenegro
- North Macedonia
- Romania
- Serbia
- Slovenia
- Turkey

Peripheral countries

- Austria
- Egypt
- Italy
- Lebanon
- Moldova
- Slovakia
- Syria
- Ukraine

Source: IENE

SEE Energy Investment Outlook 2021-2030

- The **investment prospects** in the energy sector of SE Europe over the next 10 years can only be described as **positive**.
- In terms of planned investments, a group of **five countries (i.e. Turkey, Bulgaria, Romania, Serbia, Greece)** appear to be moving **much faster than others** in attracting the needed investment for a variety of energy projects, while progress in the rest of the countries is moving more slowly.
- The region as a whole can be considered as presenting **attractive business opportunities in almost all branches of the energy sector**. The present analysis shows that investment in the energy sector will be spread as follows between countries and interregional projects.
- Compared to investment estimates made in the 2017 edition of IENE's "SEE Energy Outlook", the current estimates for energy related investments in SEE are much higher (+€137.5 billion) for the 13 country reference group, indicating strong interest for investments in the region.

Findings of SEE Energy Investment Outlook Per Country (2021-2030)

Country	Estimated Investment (mn €) 2021 Estimate	Estimated Investment (mn €) 2017 Estimate	GDP growth 2021 (%) IMF World Economic Outlook	GDP growth annual projection to 2025 (%)
Albania	4,500	7,460	5.3	**3.5-4.5**
Bosnia and Herzegovina	9,400	8,722	2.8	**3-3.2**
Bulgaria	47,000	11,050	4.5	**3.1-4.5**
Croatia	21,000	8,525	6.3	**3.2-5.8**
Cyprus	16,200	7,350	4.8	**2.7-3.6**
Greece	44,400	23,300	6.5	**1.5-4.6**
Hungary	25,300	-	7.6	**2.6-5.1**
Israel	39,300	-	7.1	**3.2-4.1**
Kosovo	7,400	2,605	4.8	**n/a**
Montenegro	4,600	2,400	7.0	**2.9-5.6**
North Macedonia	10,400	3,400	4.0	**3.6-4.2**
Romania	50,100	20,630	7.0	**3.6-4.8**
Serbia	15,200	11,260	6.5	**4.0-4.5**
Slovenia	12,100	3,185	6.3	**2.9-4.6**
Turkey	130,000	124,935	9.0	**3.3**
TOTAL	**436,900**	**234,822**		

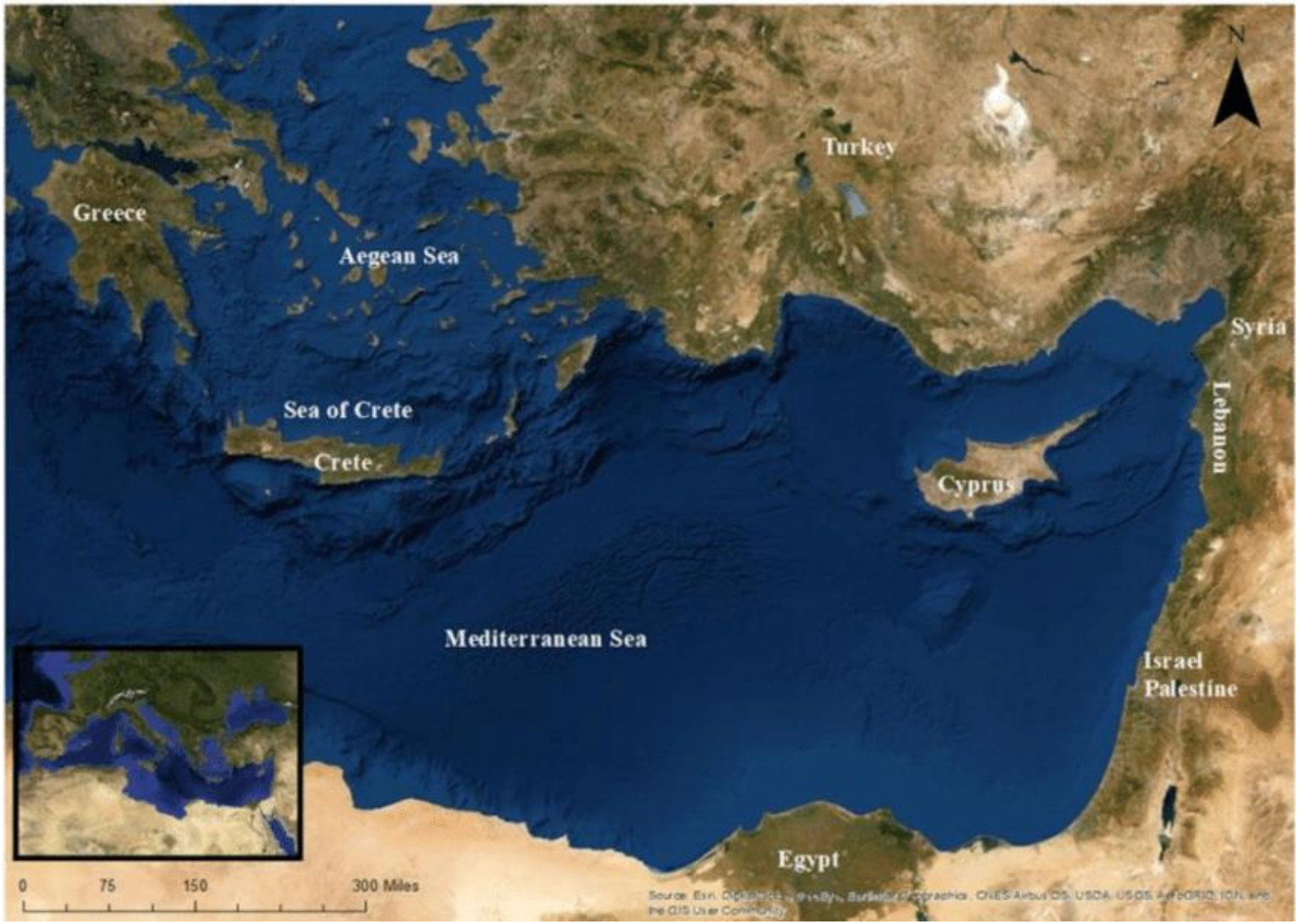
NB. Hungary and Israel were not included in the 2017 SEE Country Survey and hence no estimates have been prepared by IENE.

Findings of SEE Energy Investment Outlook Per Sector (2021-2030)

	Project sector	Description	2021 Investment estimate (€ mn)	2017 Investment estimate (€ mn)*
OIL	Upstream	• Field Exploration • Development of new oil and gas wells	63,000	38,790
	Downstream	• Refining (upgrading) • Loading Terminals • Storage facilities • Crude / Product Pipeline(s)		
GAS	Country Gas Network	• Grid development • Main intra country pipeline(s) • Storage facilities • FSRU and LNG Terminals	25,150	16,550
ELECTRICITY	Power Generation	• Lignite • Coal • Gas (including CHP) • Nuclear • Large Hydro	150,150	139,550
	Electricity Grid	• New H/V transmission lines • Upgrading and expansion of existing grid		
	RES	• Small Hydro • Wind farms • Photovoltaics • Concentrating Solar Power • Biomass (including liquid biofuels) • Geothermal	109,900	40,009
ENERGY EFFICIENCY		• Buildings • Industry • Electric vehicles	88,700	-
	Total anticipated investments by 2021-2030		436,900	234,822
	Gas infrastructure		23,303	33,350
	Electricity Interconnections		8,440	4,700
	Cross-border energy projects (total)		31,743	38,050
	Grand Total		**468,643**	**272,872**

*(1) This estimate refers to Scenario A as stated in SEE Energy Outlook 2016/2017, p. 1123-1124.
(2) No investment estimates for Energy Efficiency applications were provided in the SEE Energy Outlook 2016/2017.

The Position of Cyprus in the Eastern Mediterranean



Οι Βασικοί Ενεργειακοί Επενδυτικοί Άξονες της Κύπρου

- Αναβάθμιση, εκσυγχρονισμός και επέκταση δικτύων ηλεκτρικής ενέργειας (μεταφορά και διανομή)
- Νέες θερμικές μονάδες παραγωγής ηλεκτρισμού (με φυσικό αέριο)
- Διεθνείς ηλεκτρικές διασυνδέσεις (EuroAsia Interconnector, EuroAfrica Interconnector)
- Ανανεώσιμες Πηγές Ενέργειας (φωτοβολταϊκά και αιολικά πάρκα, υπεράκτια αιολικά, αποθήκευση ενέργειας με ηλεκτρικές μπαταρίες)
- Ενίσχυση συστημάτων διεσπαρμένης παραγωγής ηλεκτρικής ενέργειας από ΑΠΕ
- Βελτίωση ενεργειακής αποδοτικότητας (κατοικίες, επιχειρήσεις, βιομηχανία, μεταφορές)
- Εγκατάσταση τερματικού LNG στο Βασιλικό και κατασκευή χερσαίων έργων υποδομής
- Δημιουργία δικτύου φυσικού αερίου στην Κύπρο (κύριοι αγωγοί και δίκτυα)
- Συνέχιση προγράμματος ερευνών υδρογονανθράκων εντός Κυπριακής ΑΟΖ
- Εκμετάλλευση βεβαιωμένων κοιτασμάτων για παραγωγή πετρελαίου και φυσικού αερίου

Energy Investment Outlook Per Sector in **Cyprus** (2021-2030)

	Project sector	Description	Investment estimate (€ mn)
OIL	Upstream	• Field Exploration • Development of new oil and gas wells and associated infrastructure	8,200
	Downstream	• Loading Terminals • Storage facilities	
GAS	Gas Network	• Grid development • Main intra country pipeline(s) • Storage facilities • FSRU Terminal	800
ELECTRICITY	Power Generation	• Gas (including CHP)	1,200
	Electricity Grid	• New H/V transmission lines • Upgrading and expansion of existing grid	
	RES	• Small Hydro • Wind farms • Photovoltaics • Concentrating Solar Power • Biomass (including liquid biofuels)	1,000
ENERGY EFFICIENCY		• Energy upgrading of buildings/transport	5,000
	Total anticipated investments by 2030		16,200

Sources of Finance

- The **main sources of finance** for planned energy infrastructure projects in SE Europe include:
  - Government/own resources
  - International Financial Institutions (IFIs)
    - European Commission
    - European Bank for Reconstruction and Development (EBRD)
    - European Investment Bank (EIB)
    - World Bank
    - German government-owned development bank KfW
    - European Western Balkans Joint Fund (EWBJF)
    - International Development Association (IDA)
  - Commercial banks/private investors
  - Financial facilities for investments in energy efficiency and renewable energy

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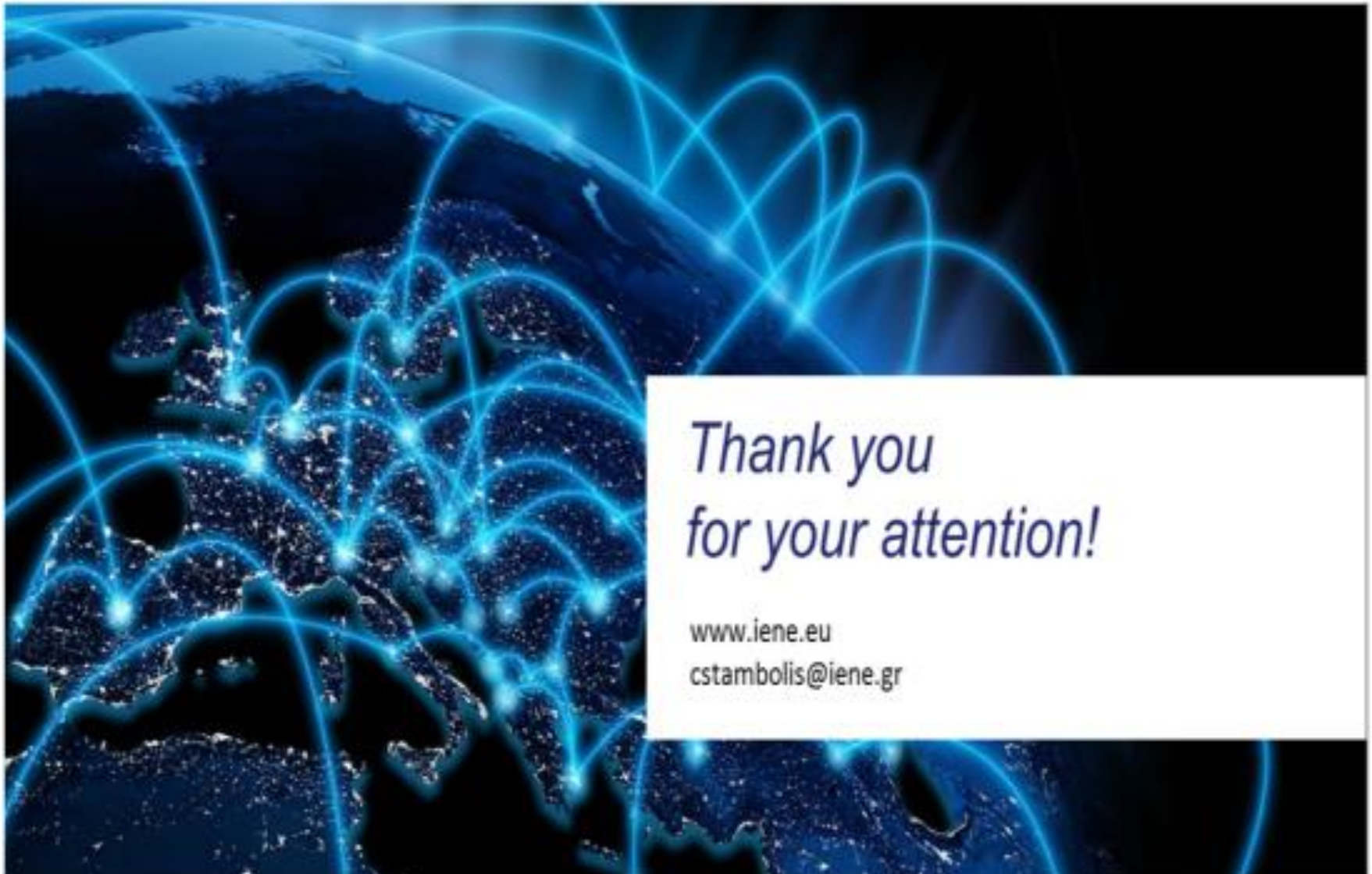

Thank you
for your attention!

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