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Hellenic Foundation for  
Research & Innovation



**S O C I N V E S T**  
Sociology of FDI politics in Greece



# The social embeddedness of the emergence and internationalization of the wind energy market in Greece

Margarita Komninou, Nicos Souliotis, Gerasimos Karoulas & Alex Afouxenidis

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# Wind Energy in Greece: some trends and numbers



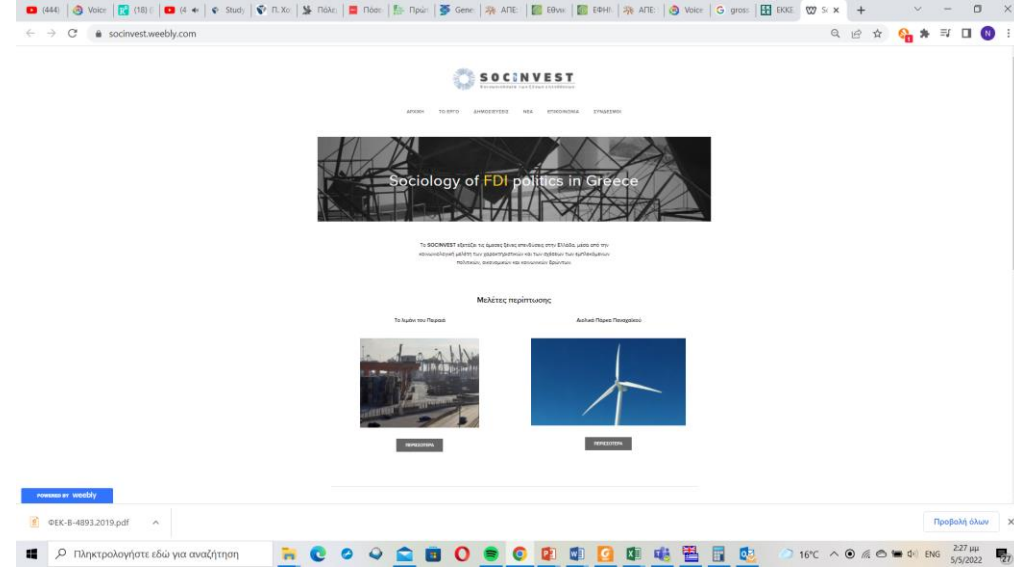
- **A very dynamic development**
- the total capacity to the grid of wind energy increased from 107 MW in 1999 to 1336 MW in 2010 and 4374 MW in 2021 (source: HWEA), that is more than 300% increase of the during the last decade
- RES represented 29,2% of the gross final electricity consumption in 2020 (source: IPTO)
- **And even more ambitious policy goals**
- According to the National Plan for Energy and Climate, RES' share in gross final electricity consumption should reach 61% in 2030 (Ministry of Environment, 2019)

# Questions

- A sociological approach to market emergence
  - Sociogenesis of the wind energy market
- Who constructs and runs the market? (Fligstein, Bourdieu)
- Analysis in terms of *process* (Abbott, Elias):
  - a. symbolic and technological preconditions, b. definition of institutional-economic means to address climate change, c. production of the producers, d. fighting for the expansion of the market
  - A “glocal” process (Swyngedouw)

# The project

- “Sociology of FDI politics in Greece” (SOCINVEST)
- Research team: Nicos Souliotis (PI), Gerasimos Karoulas, Margarita Komninou, Alex Afouxenidis
- Host institution: National Centre for Social Research
- Funding: Hellenic Foundation for Research & Innovation (Grant number: 3211)
- Duration: 15/1/2020-14/1/2023
- Research on:
  - Policies: a. Law of Strategic Investment, b. Hellenic Corporation of Assets and Participation
  - Particular investment projects: a. Privatization Piraeus Port, b. Wind farm at Panachaiko mountain (Patras)
- Data (up to now):
  - Two biographical datasets of politicians with socio-professional trajectory, managers and other key persons concerning policies (N=287) and one database on senior staff of wind energy companies (N=120) (sources: organizations’ sites, LinkedIn)
  - 40 semi-structured interviews with investors, politicians, managers, civil society organizations, local movements (out of which 9 concern wind energy)
  - various secondary sources (national statistics, legislation, corporate reports, press...)
- More: <https://socinvest.weebly.com/>



# Sociogenesis of the wind energy market: symbolic and technological preconditions 1

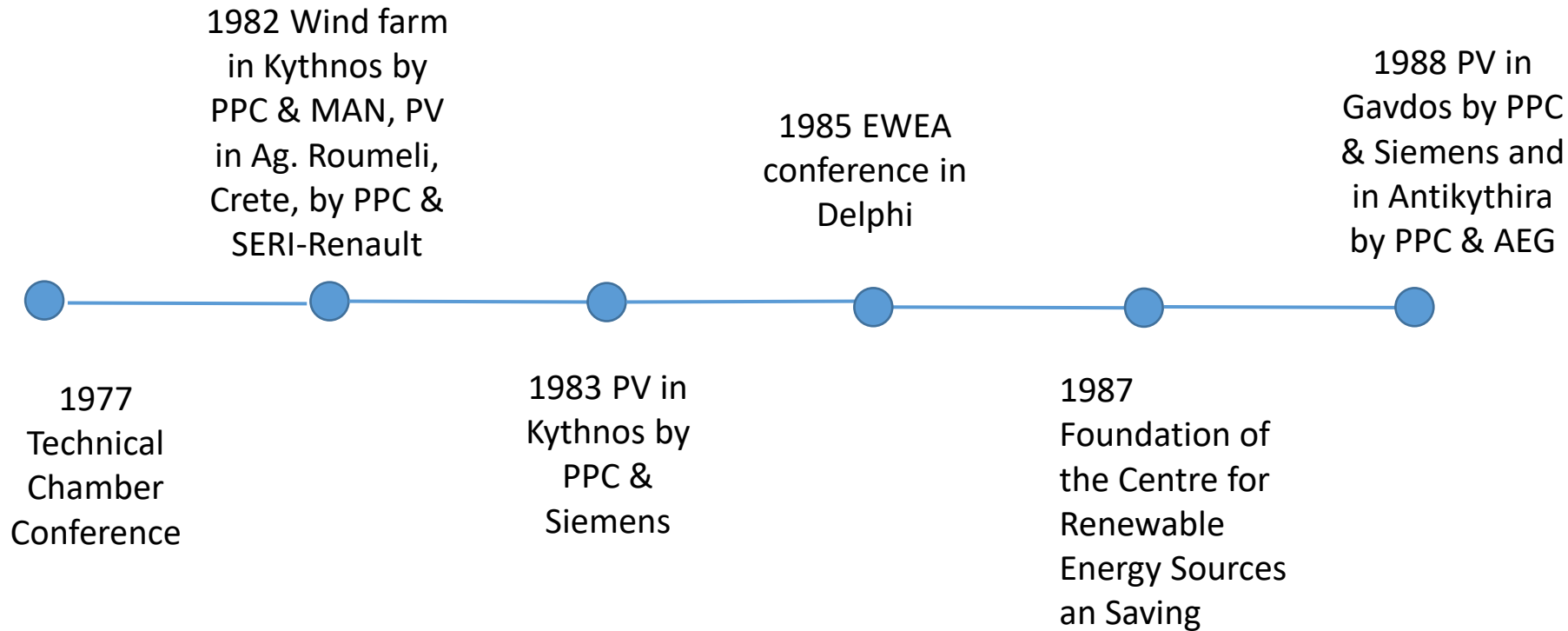
- 1970s: Oil crisis and the idea to reduce the dependence upon oil and increase energy security
- 1980s: **Scientists** (such as James Hansen) establish the phenomenon (*global warming, global heating, climate change*) and **environmental organizations** promote RES as part of the solution, **innovative corporations** (in Denmark, UK, USA, later China) develop RES technologies, first attempts for collective representation: EWEA

➡ Climate change is framed as global issue which requires global solutions

➡ Creation of the symbolic legitimation for energy transition

# Sociogenesis of the wind energy market: symbolic and technological preconditions 2

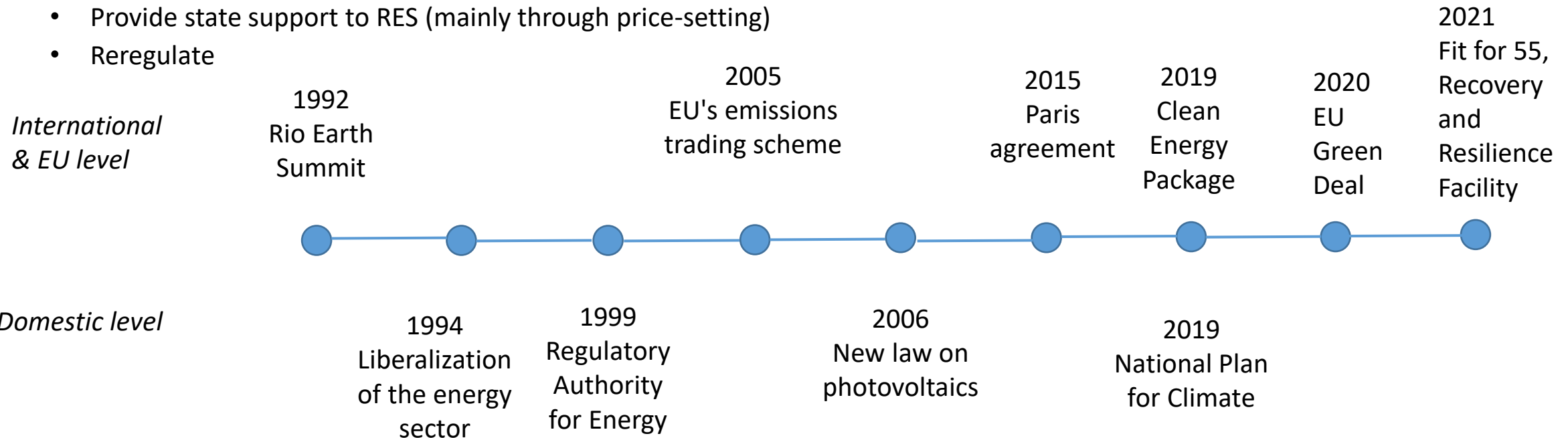
In Greece: scientific and political interest, demonstrative (mostly EC-funded) projects in islands by joint ventures of PPC with other European companies



# Sociogenesis of the wind energy market: reformulation as a market-led economic project

Politicians integrate the challenge of climate change in the policy agenda by reframing it as a market-led economic project:

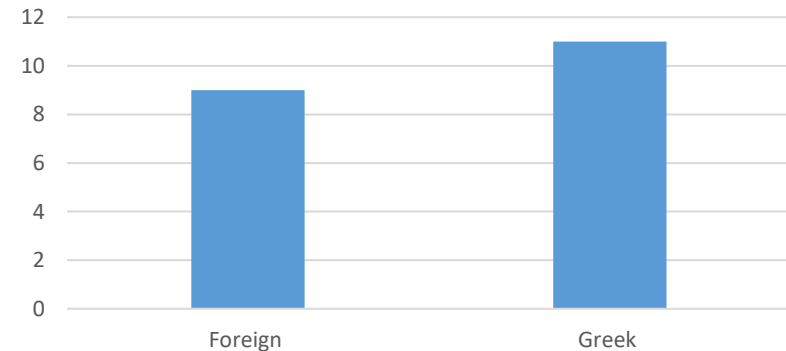
- Break state monopolies
- Penalize old technologies
- Provide state support to RES (mainly through price-setting)
- Reregulate



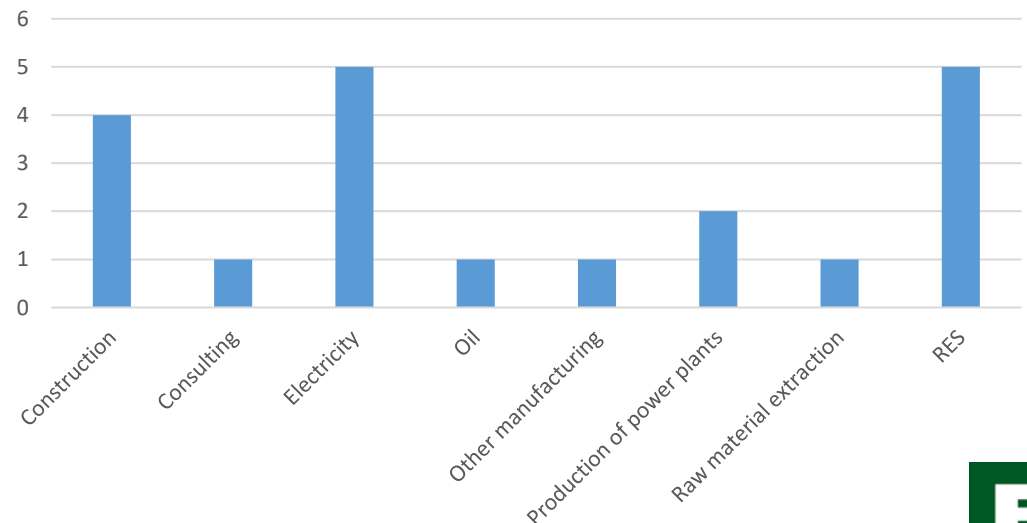
# Sociogenesis of the wind energy market: the production of producers 1

- Expansion of corporate groups' activity from other sectors, 'conversion' of staff + attraction of foreign corporations
- Creation of (some) totally new corporations
- Creation of a specific corporate structure (departments: operational, energy trade, development, finance)

National origin of 20 largest wind energy companies



Sectoral 'origin' of 20 largest wind energy companies

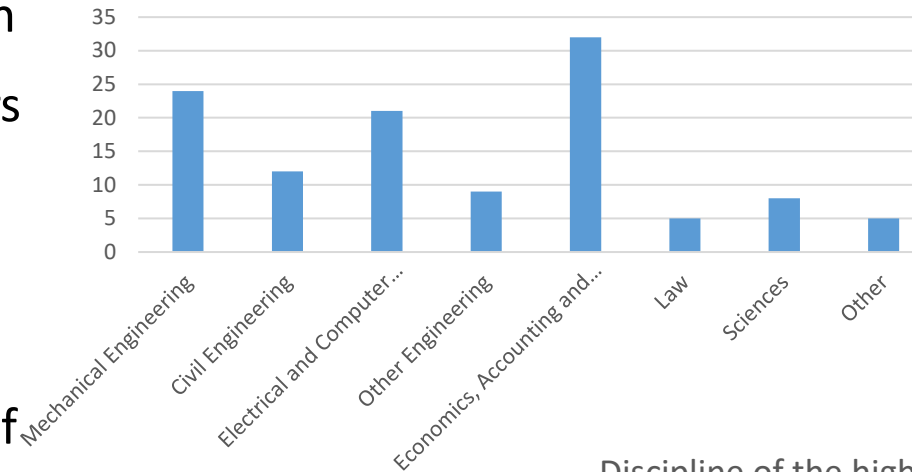




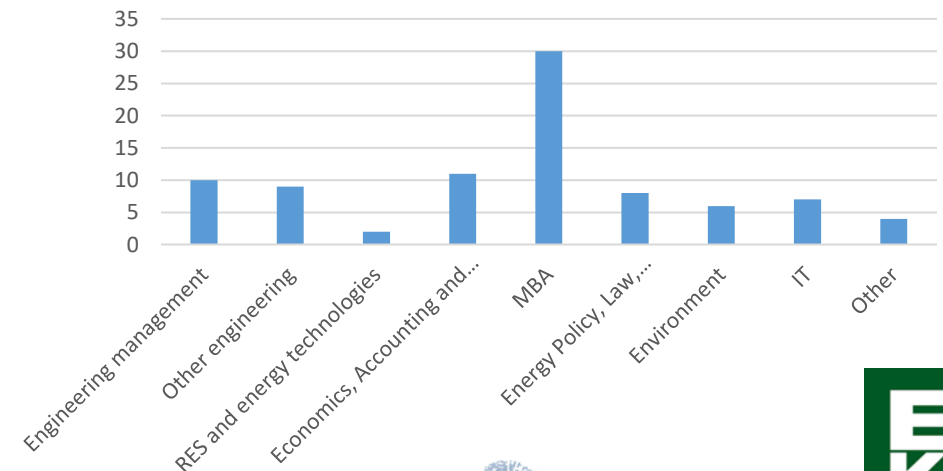
# Sociogenesis of the wind energy market: the production of producers 2

- Emergence of an **'indigenous' staff** through (increasing) specialized postgraduate programs and corporate practice: engineers specialized in RES and energy economists ('loyal' managers vs a moving elite)
- Collective representation-Hellenic Wind Energy Association, 1990 (led by managers with rare resources)
- Creation of a **market culture** (conception of control, Fligstein): project-based development. The 'game' (creation of opportunities, joint ventures, acquisitions) is played with wind farm licenses (existing licenses are 10X those required for energy goals!, interview with HWEA).
- Technology and knowledge intensive industry  
→ very limited labor!

Discipline of the first degree



Discipline of the highest degree



Converted' and 'indigenous' managers		
Years in company	Managers (%)	Age (avg)
1-5 years	35,0	45,5
6-15 years	43,7	45,1
16+ years	21,4	56,2

# Sociogenesis of the wind energy market: fighting for the expansion



## Pro-wind energy coalition

- Organized interests claim less obstacles in licensing (basic legitimation: urgency of climate crisis)
- EU and the domestic government that set energy transition goals
- Several 'established' NGOs (WWF, Greanpeace)

## Anti-wind energy coalition

- Workers in lignite consuming industry
- Local communities
- 'Radicalized' environmental organizations (Greek Ornithological Society, Kallisto)
- the environmental movement is divided!
- Opposition parties/MPs

# Concluding remarks on the emergence of the wind energy market

- A process of ‘creative destruction’ which presupposes not only a technological innovation but also of the acknowledgement of a global threat, which legitimizes the demolition of the old industry
- A critical ‘moment’: addressing the threat of climate change become conceivable since it was seen as a market-led development project
- The dominance of engineers and economists (and the underrated role of environmentalists)
- The project-based expansion shape wind energy market’s culture
- New socio-political divisions regarding market’s further expansion