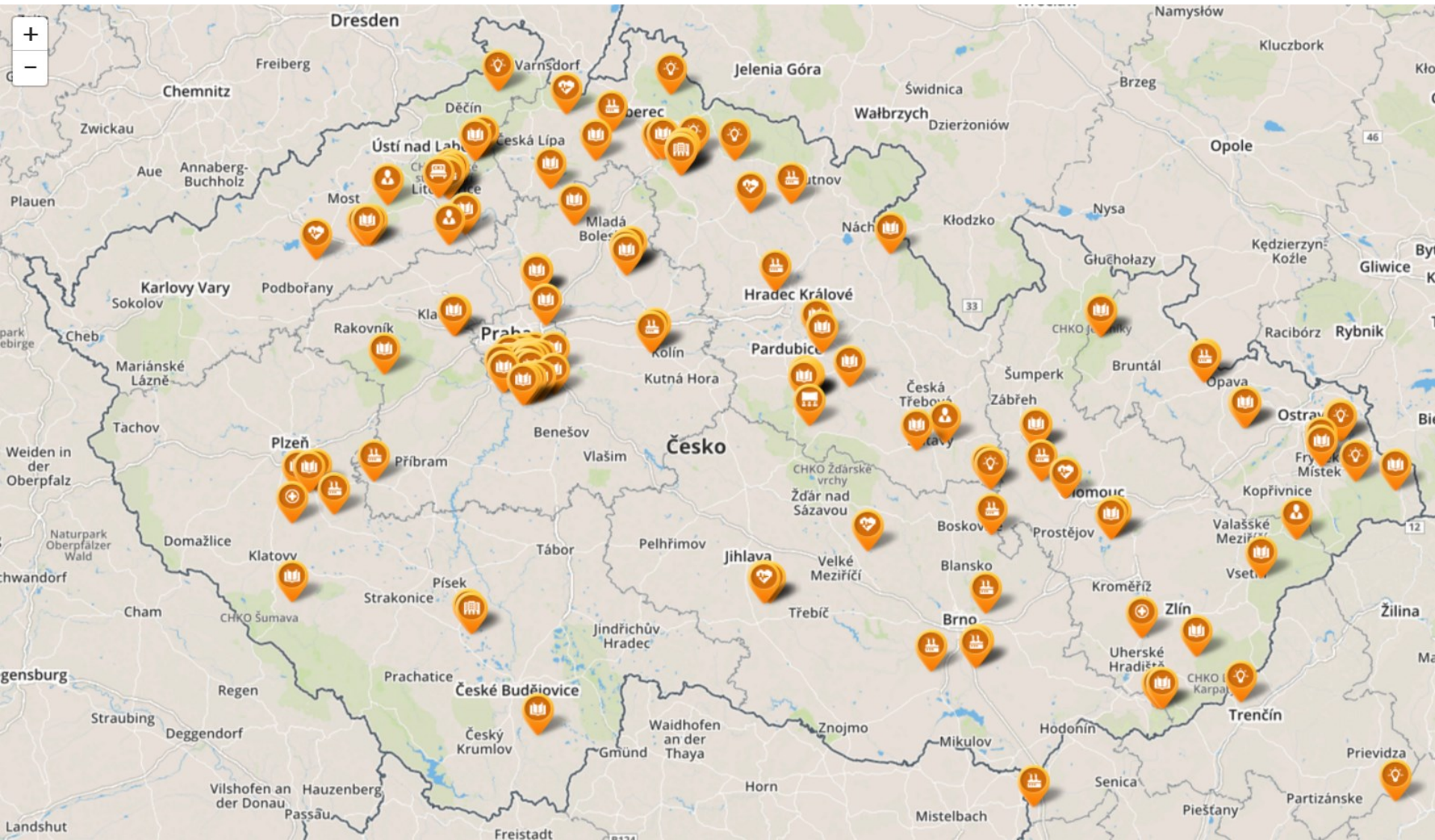


# Energy Performance Contracting – way forward?

Lukas Lehotsky  
Masaryk University, Brno

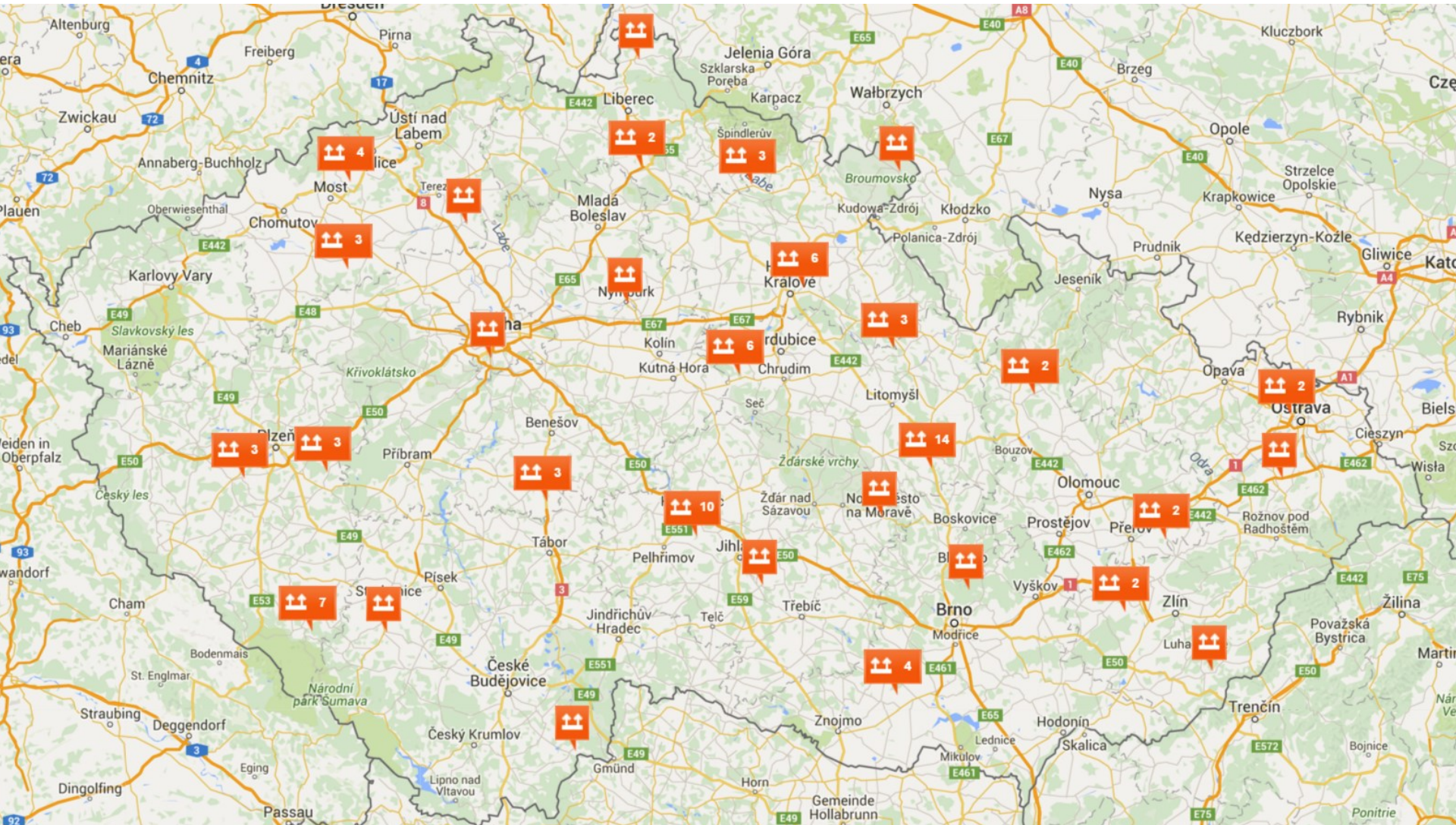
# EPC providers

- Association of Providers of Energy Services
  - 24 providers of energy services
    - Technological companies (Siemens, Philips, ...)
    - Energy providers (E.On, CEZ, RWE, ...)
    - EPC-specific companies
- 20 years, ~200 projects
- EPC market growing approx. 15% per year



# EPC by energy majors

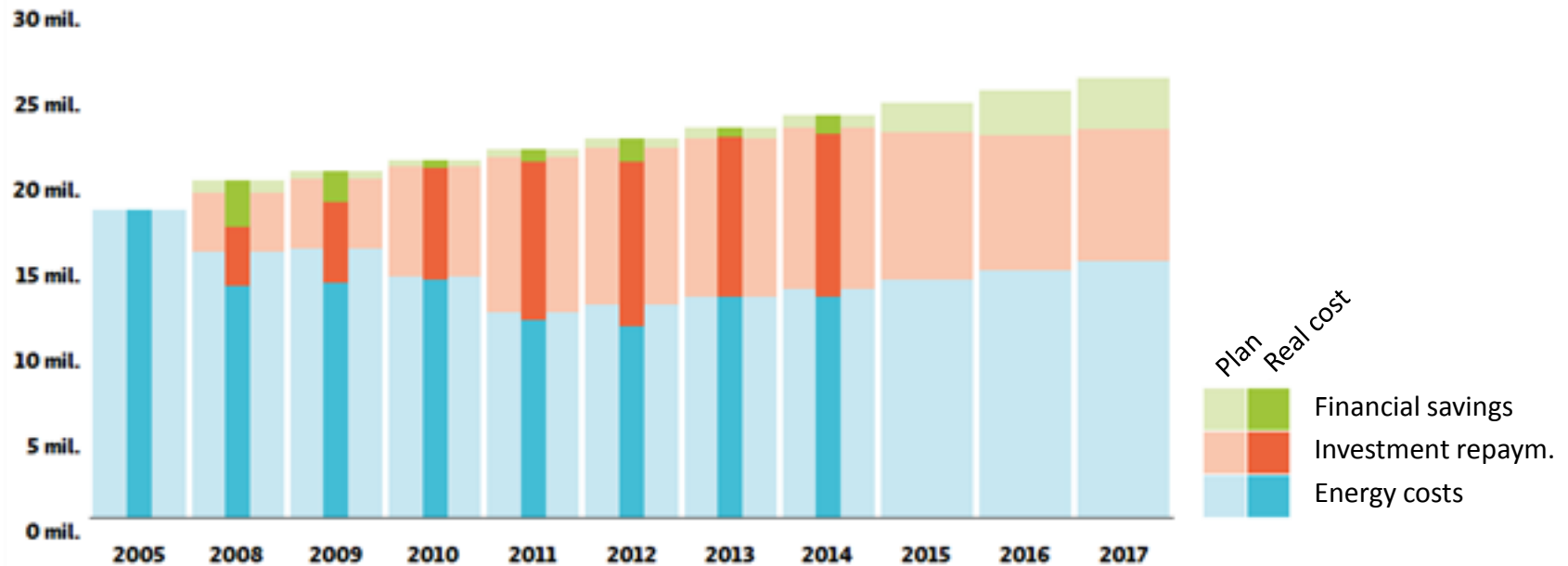
- Cogeneration implementations
  - Cities and villages (Adamov, Frydlant, Svitavy, ...)
  - Industrial complexes
  - Schools
  - Hospitals
- Lighting
- Monitoring and management of energy flows



# EPC at public institutions

- Public institutions and various actors' buildings inefficient and seriously underinvested
- Potential in savings
- Series of successful implementations already in place
  - Hospitals
  - Schools
  - Various public institutions

# National theatre in Prague



# EPC in Pardubice region

- Decision to invest 138 million CZK in 2007
  - 10-11 years for investment to return
  - 3 companies
  - 22 schools, 6 medical institutions, 3 social services institutions, 2 schools for children with disabilities, 2 student houses
  - Overhaul and reconstruction of heating, remotely managed
- Another 90 million CZK investment in 2012
  - Hospital in Pardubice
  - Overhaul of washing technology
  - 11 years



# Lighting – typical case of EPC

- Public lighting
  - Sodium lighting (most common in CZ) replaced by LED lights
  - Up to 80% of energy savings
  - Smart management of lighting intensity
  - Quick return over investment – 3 to 4 years
- Industrial lighting
  - Potential in number of installations
  - Yet not large potential in overall energy savings

# EPC projects on individual level

- Unusual on Czech market
- Currently one project in lighting sector
  - Initiative of a major gas and electricity provider
  - Provide LED lighting to households
  - Financed from savings
- Individual EPC questionable

# Issues with EPC

- Not widely used
- Seems to be paradoxical in times when there is lack of available funds at Governmental levels
- Main barriers to demand
  - Central state organizations are not allowed to implement “supplier loan”
  - Administrative complexity of establishing EPC
  - Selling debt to banks perceived with suspicion
  - Internal administrative and approval processes
  - Lack of general endorsement
  - Issue of debt calculation
  - Issue of ownership