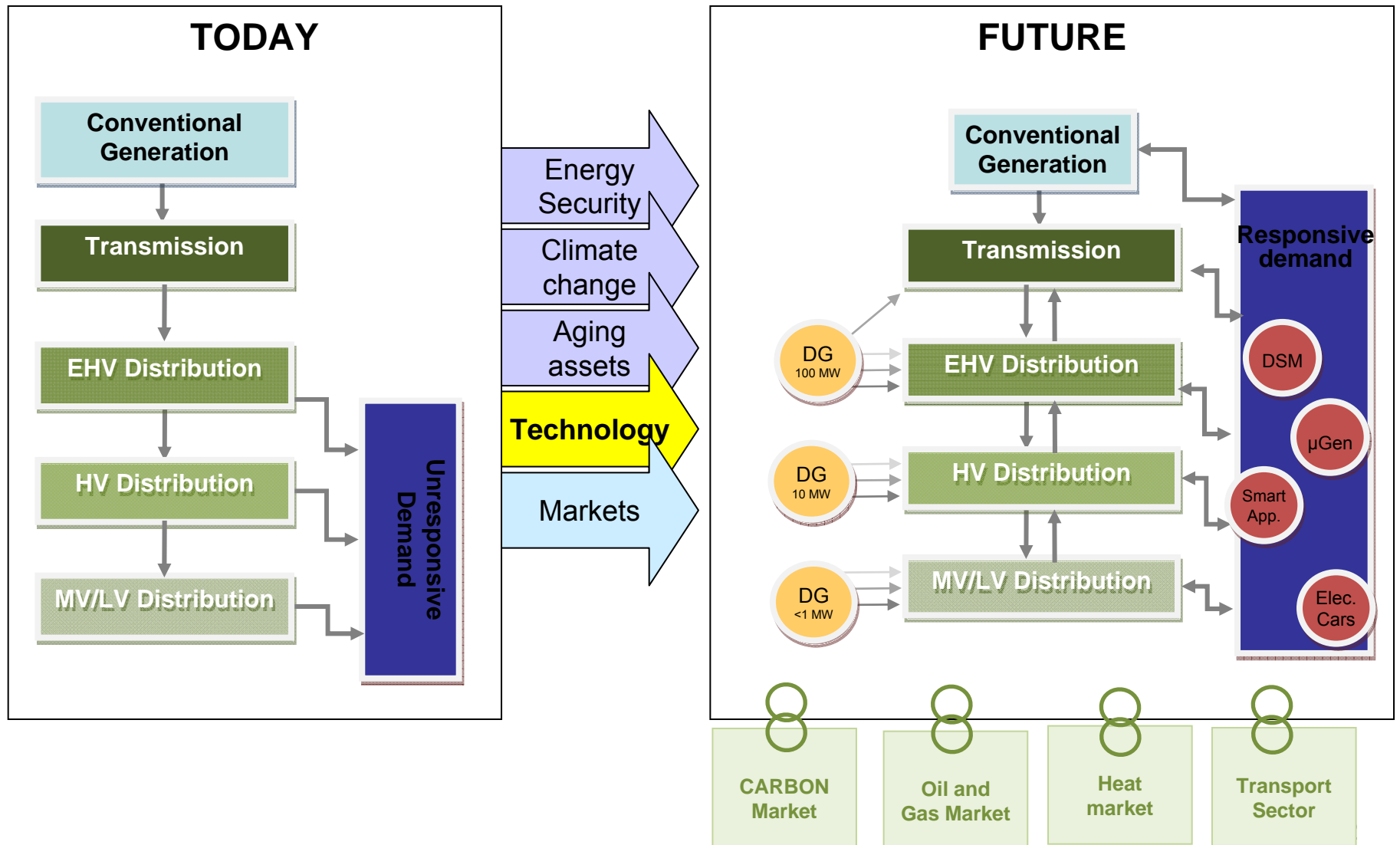




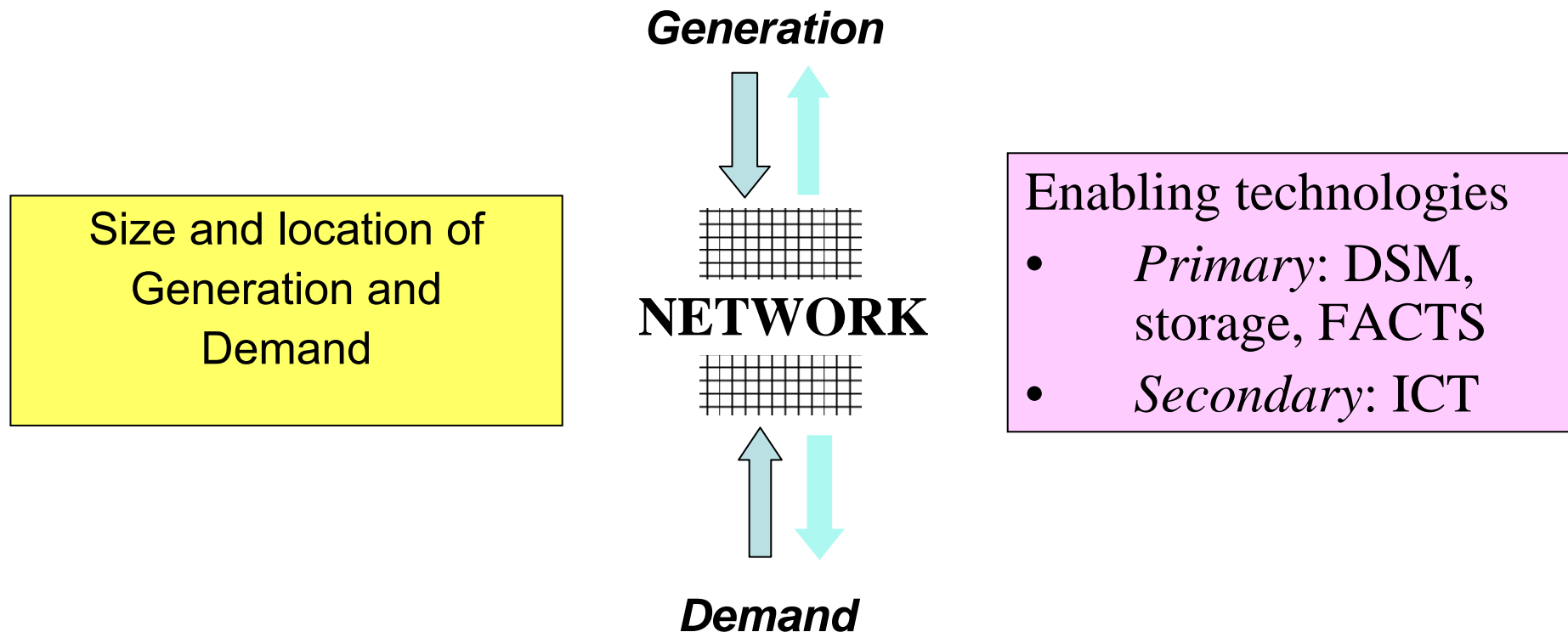
# Smart, Flexible Controls

*Making networks fit for  
renewables ...*

# Electricity system in transition



# Drivers for network development



*Impact of policy, commercial and regulatory frameworks*

# Flexibility through primary assets or more sophisticated operation?



- More sophisticated control and decisions making prices using advances in metering, communication, information infrastructure
  - Preventive versus corrective control
  - Local versus wide area monitoring, control and protection
- Enabling technology: demand side, storage, FACTS

# Three key research questions



- How benefits and risks of introducing the concept of coordinated corrective control can be quantified ?
- How distributed generation and responsive loads can be integrated with distribution and transmission network operation ?
- What are the alternative corrective control implementation strategies and how information from wide area measurement systems could be used ?