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# Utility 3.0

## Roles of Future Utility

TEPCO Power Grid  
Hiroshi Okamoto



# 5D's : Triggers

**Deregulation**

**Digitalization (IoT/AI, DX)**

**Decentralization**

**Decarbonization**

**Depopulation**



# Utility Transformation Driven by 5D's

**Utility 1.0 : Vertically Integrated Utility**



**Deregulation**

**Utility 2.0 : Unbundling of T&D Business**

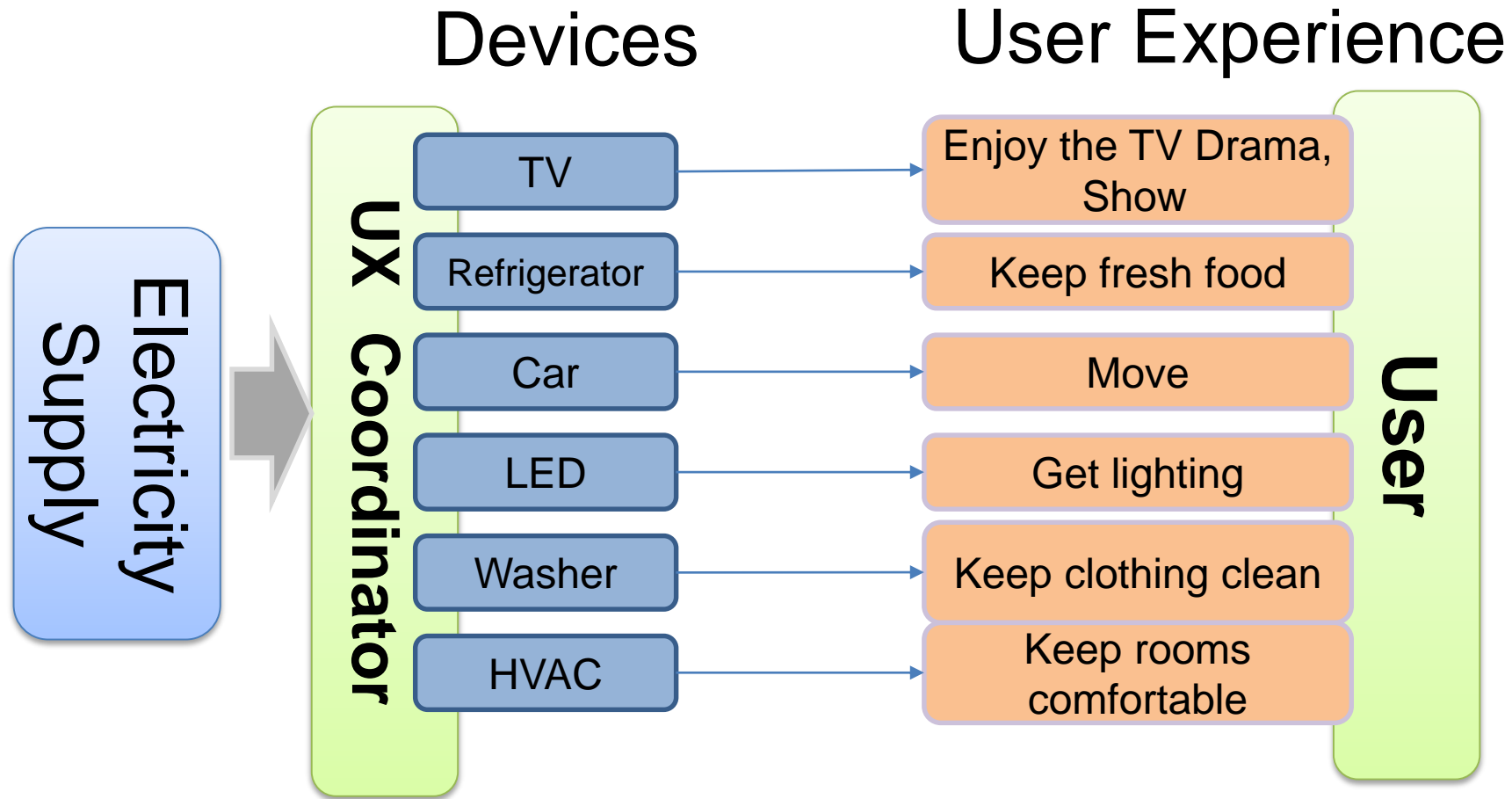


**Digitalization  
Decentralization  
Decarbonization  
Depopulation**

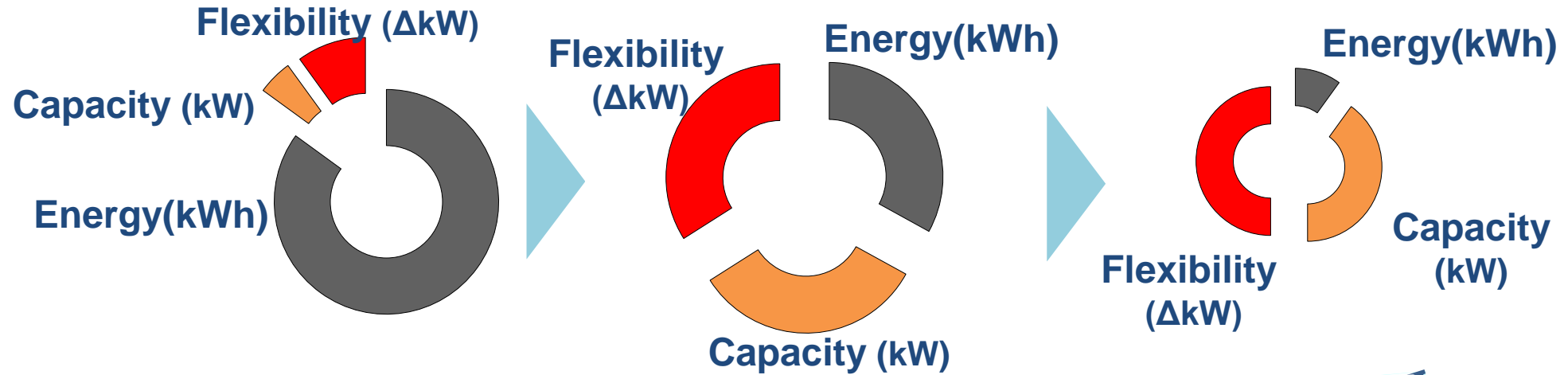
**Utility 3.0 : Integration with Other Platforms**



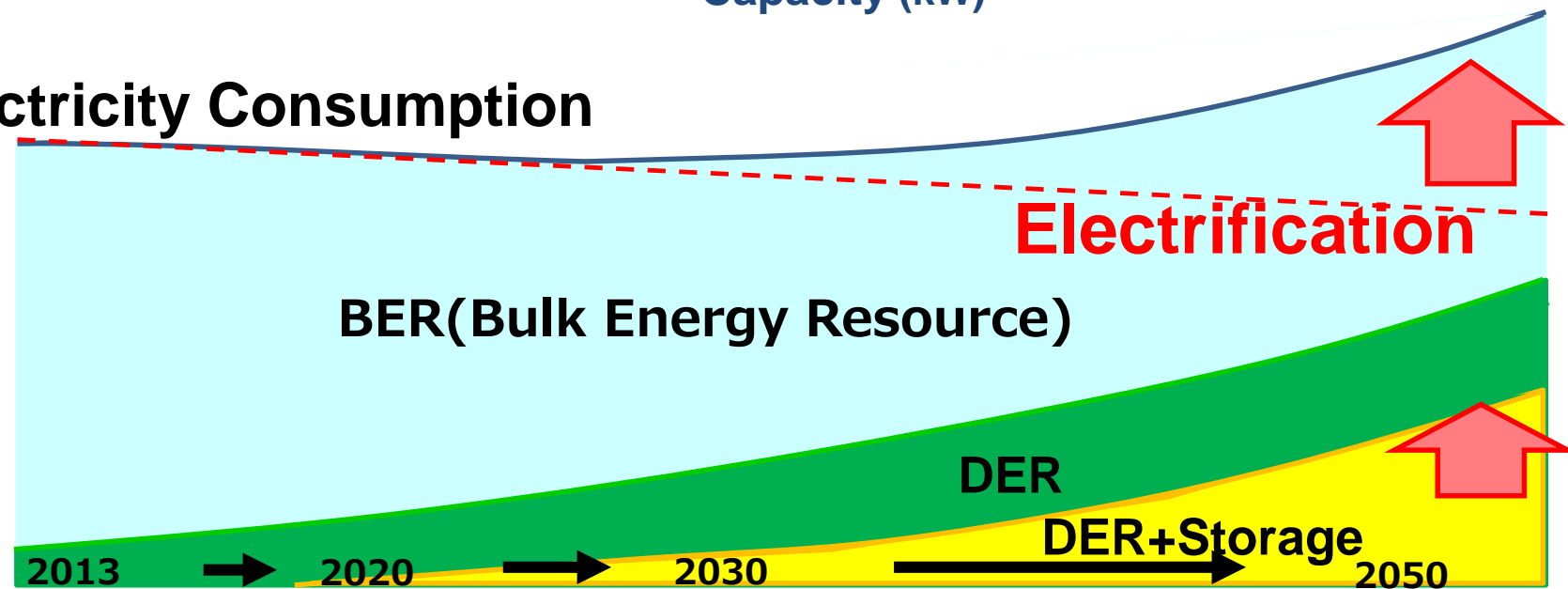
# DX of Electricity Retail Service



# Energy Shift Driven by Electrification x Decentralization



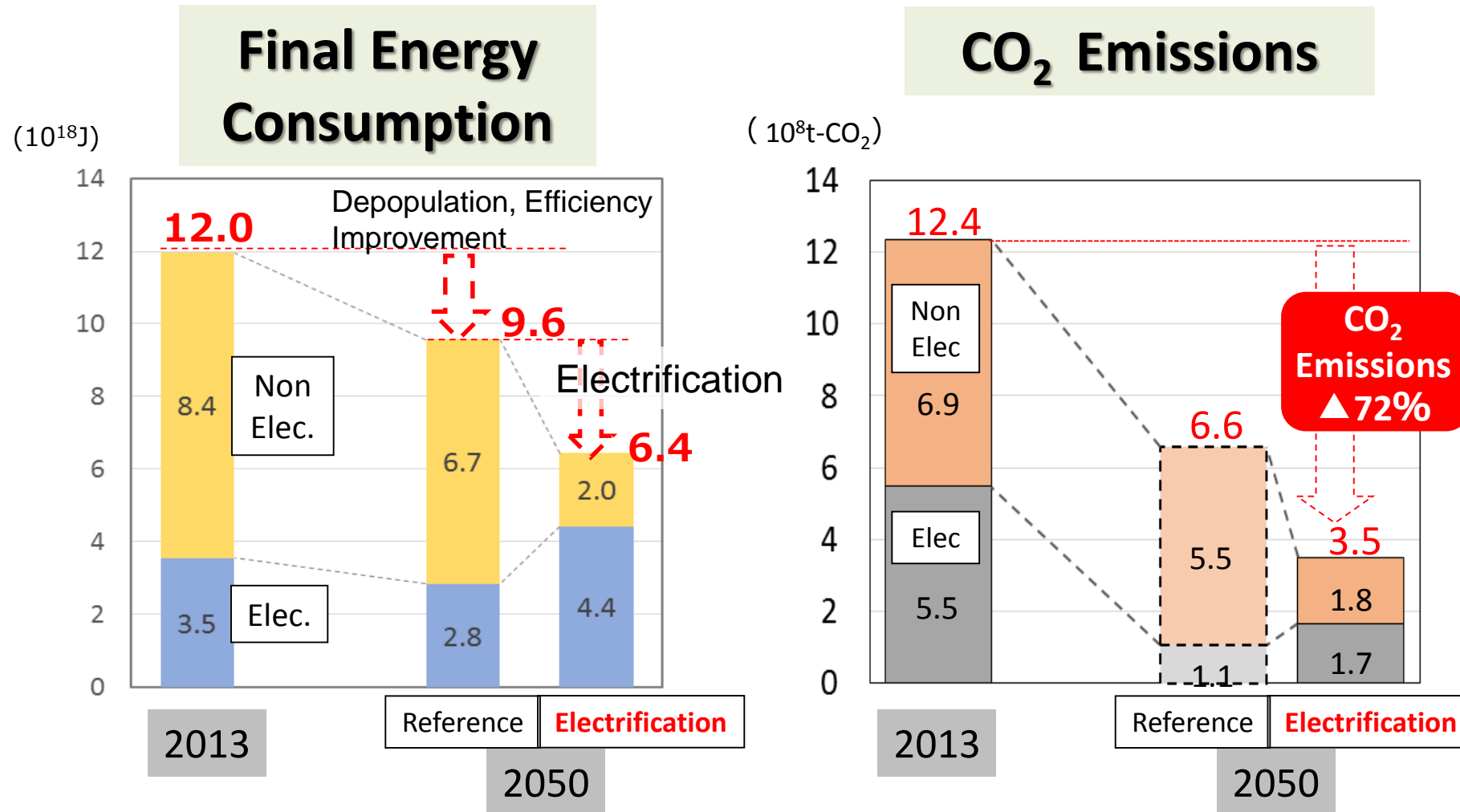
## Electricity Consumption



Source: TEPCO Research Institute



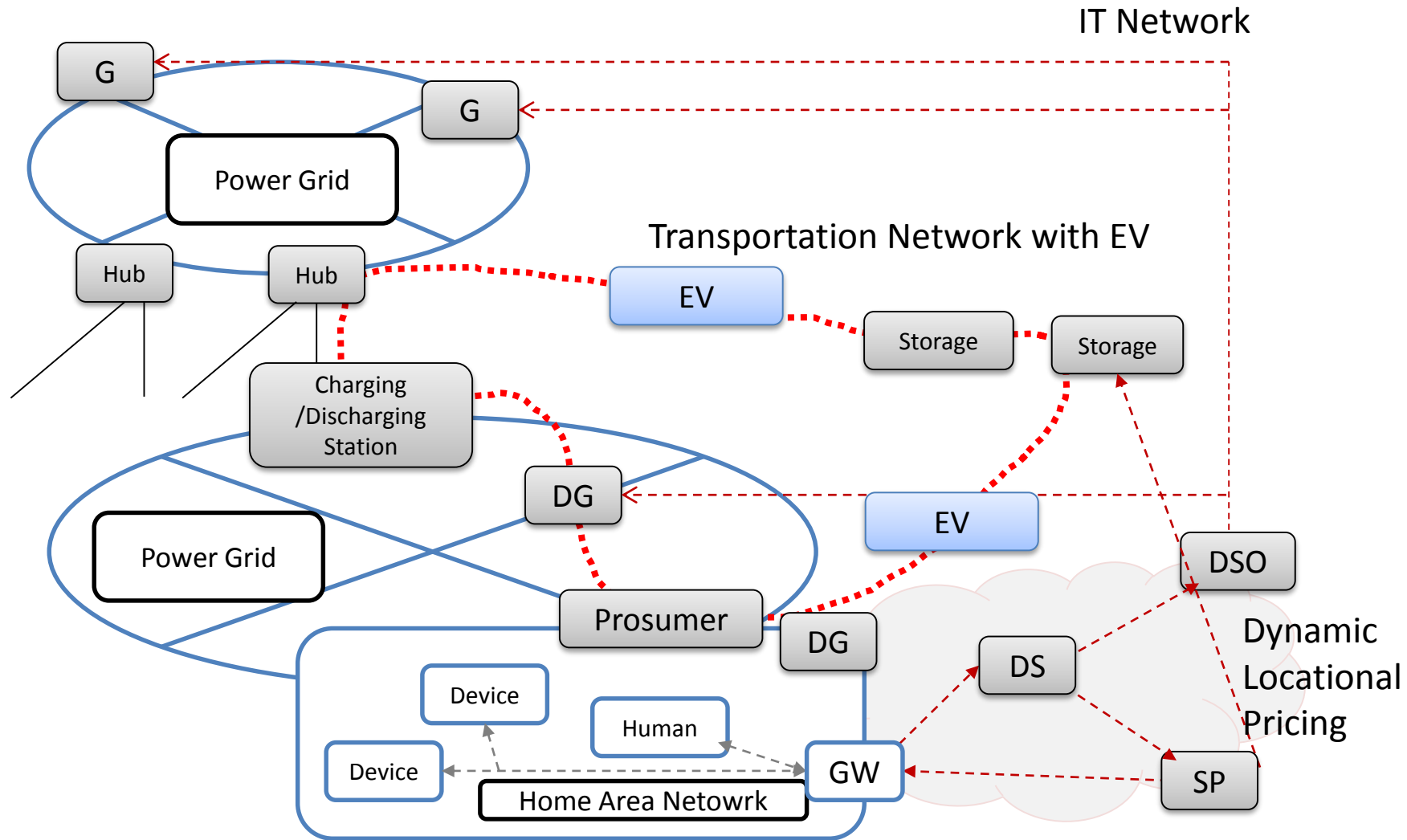
# Electrification: Key to Decarbonization



Source: TEPCO Research Institute



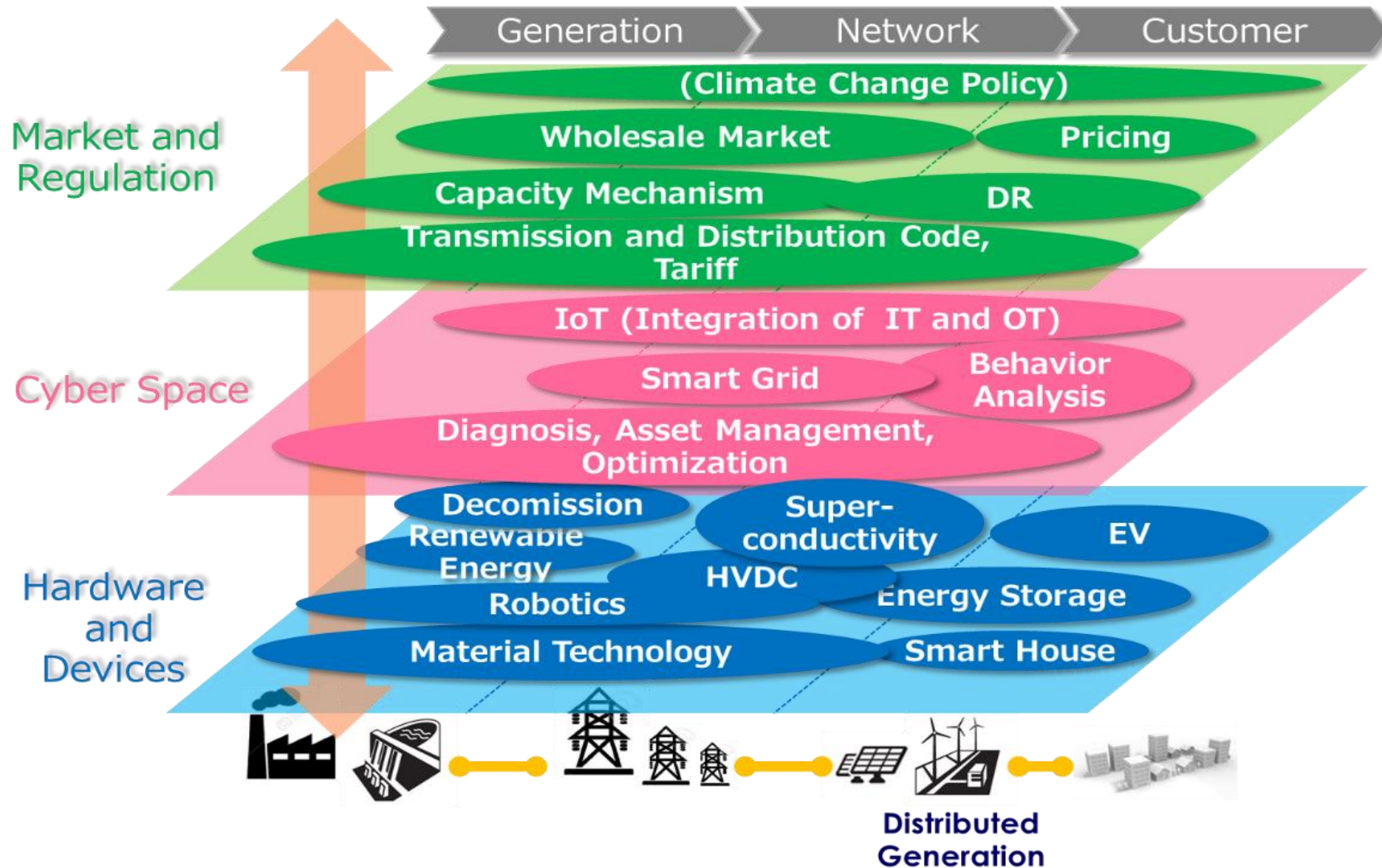
# Integration of Transportation and Power System



G:Generator  
 SO:System Operator  
 DG:Distributed Generator  
 SP:Service Provider  
 DS:Data Storage  
 GW:Gateway



# Grid as a Platform for Society 5.0 (CPS)





# Conclusion

5D's (Deregulation, Digitalization, Decentralization, Decarbonization, Depopulation)



- Electrification of transportation and heating
- Partnership and integration with other partners



Power Grid as a Platform driving Society 5.0

