



## Developing a National Energy System Model

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# NREL at a Glance

2,050

**Employees,**  
plus more than  
**400**

early-career researchers  
and visiting scientists



**World-class**  
facilities, renowned  
technology experts

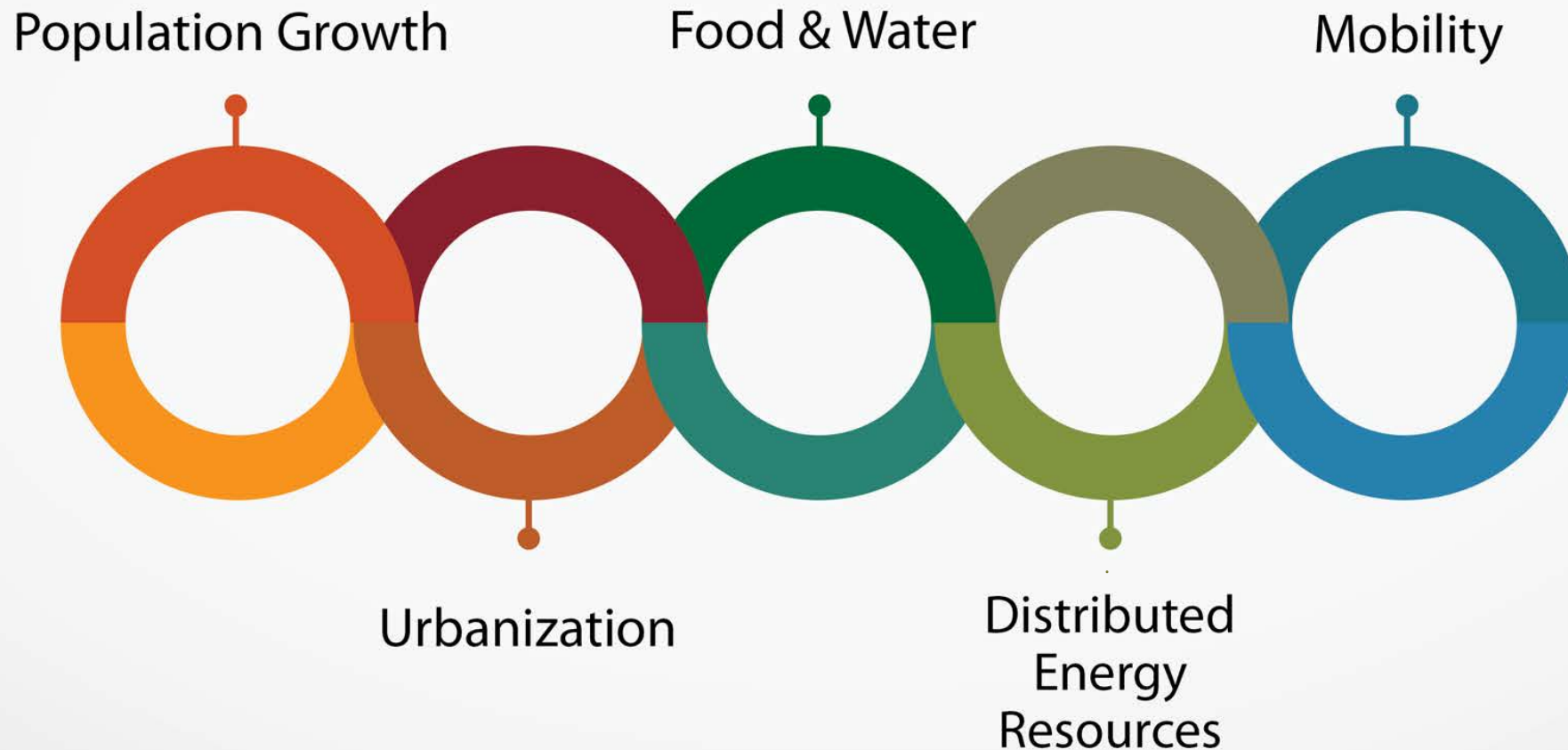
nearly  
**820**

**Partnerships**  
with industry,  
academia, and  
government



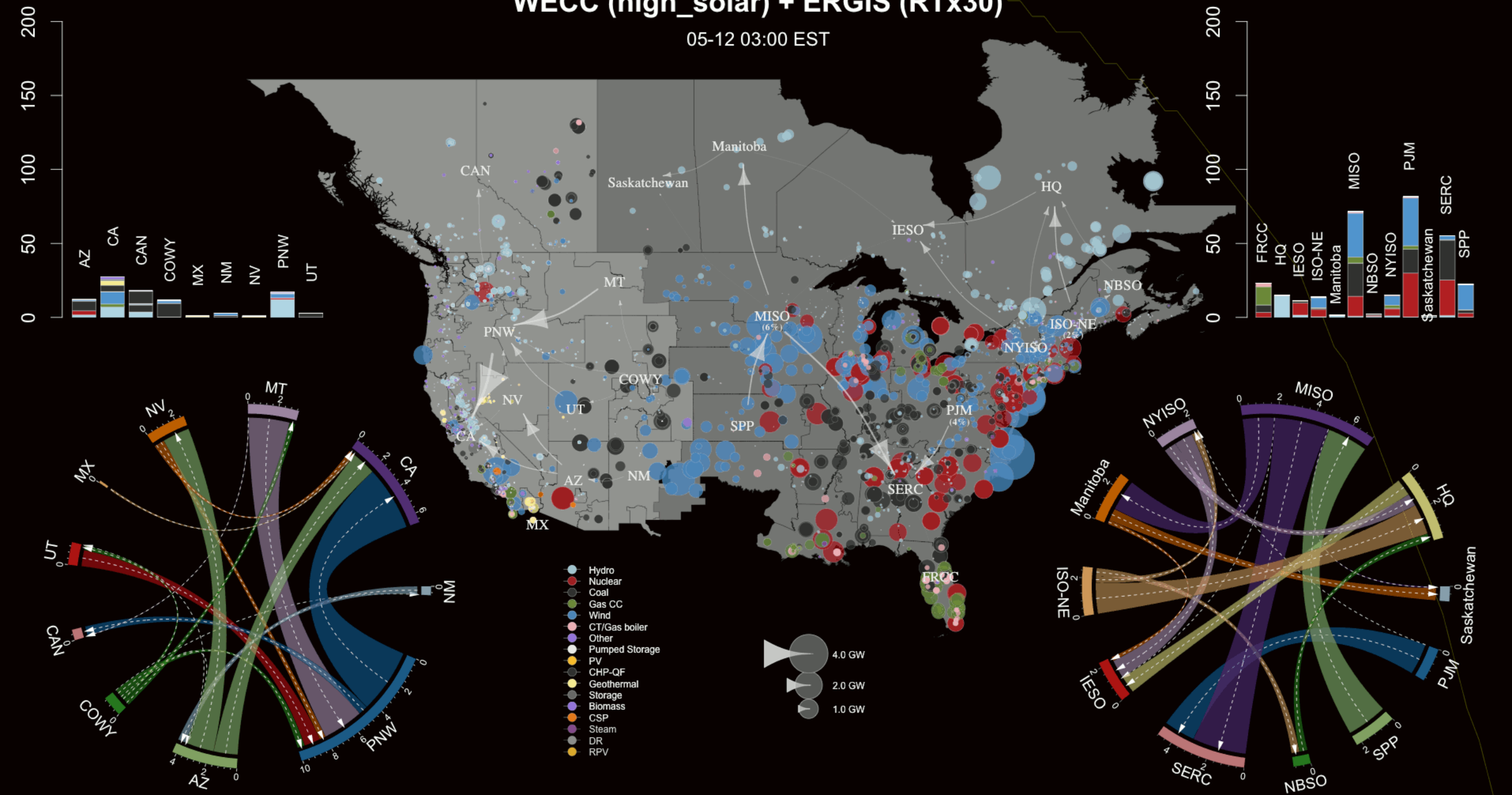
**Campus**  
operates as a  
living laboratory

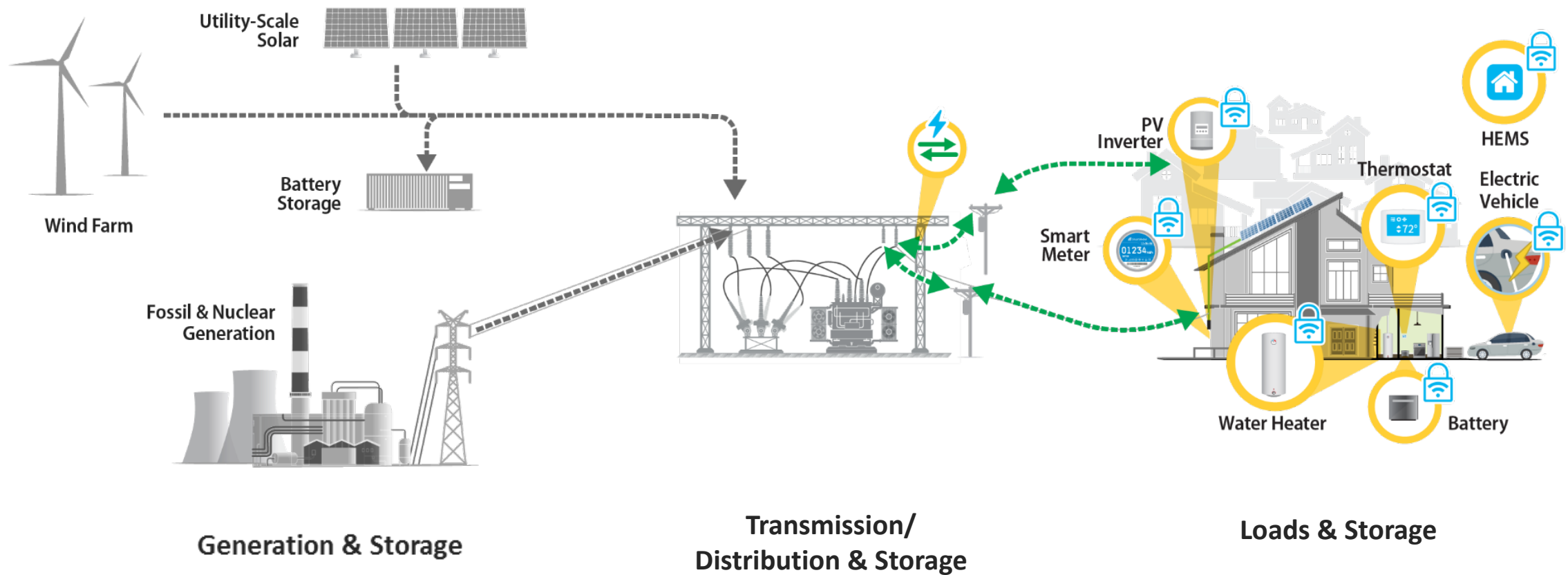
# Mega Trends





05-12 03:00 EST





The grid is  
changing quickly

Cost-competitive renewables are making up a larger share of the energy mix. The **grid edge** is transforming into a dynamic space where energy isn't just passively consumed, but **generated, stored, managed, and traded**.



# LA100: The Los Angeles 100% Renewable Energy Study



## LADWP

\$6 billion annual  
budget  
9,400 employees  
4 million residents



## Advisory Group

Diverse energy  
backgrounds  
Quarterly meetings  
Policy oriented



## Integrated Electricity Modeling

Full range power  
system modeling  
Integrated  
transmission and  
distribution analysis



## Environmental Analysis

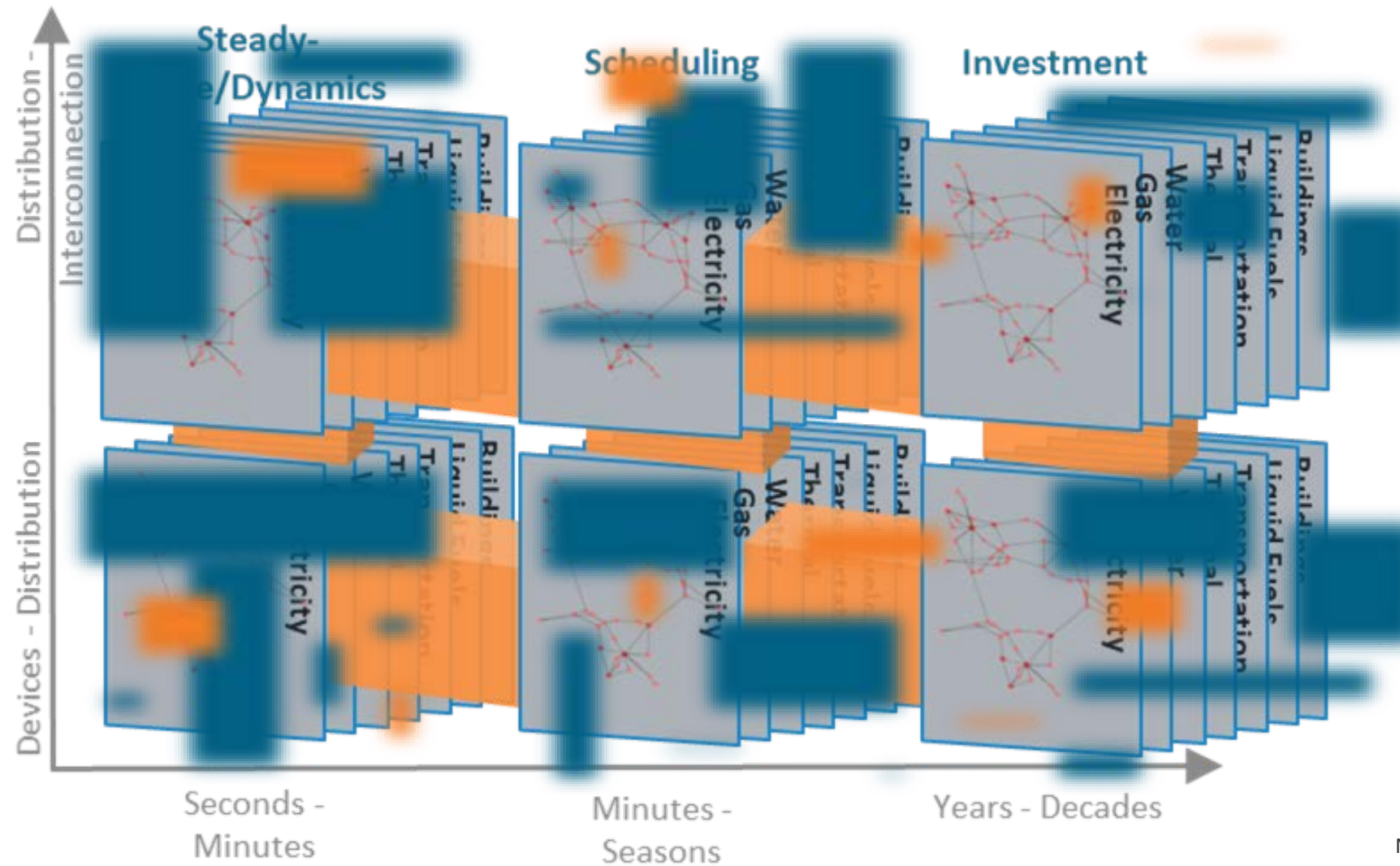
Air quality  
Environmental  
Impact



## Economic Analysis

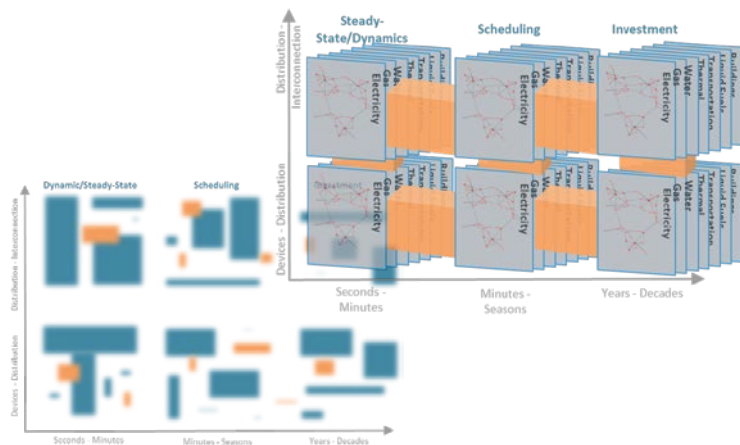
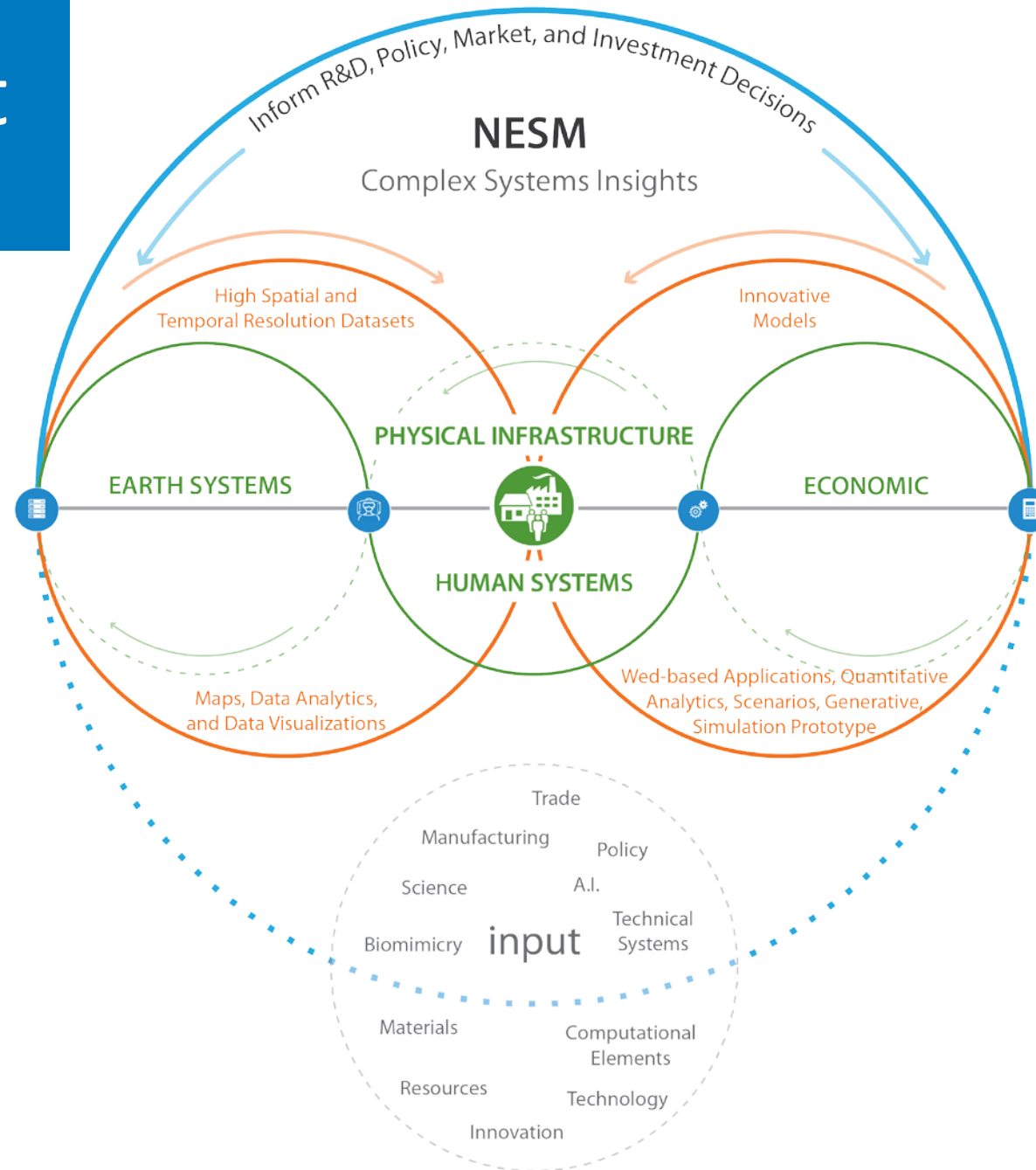
Job creation  
Job migration  
Economic  
development

# How we are planning to get there

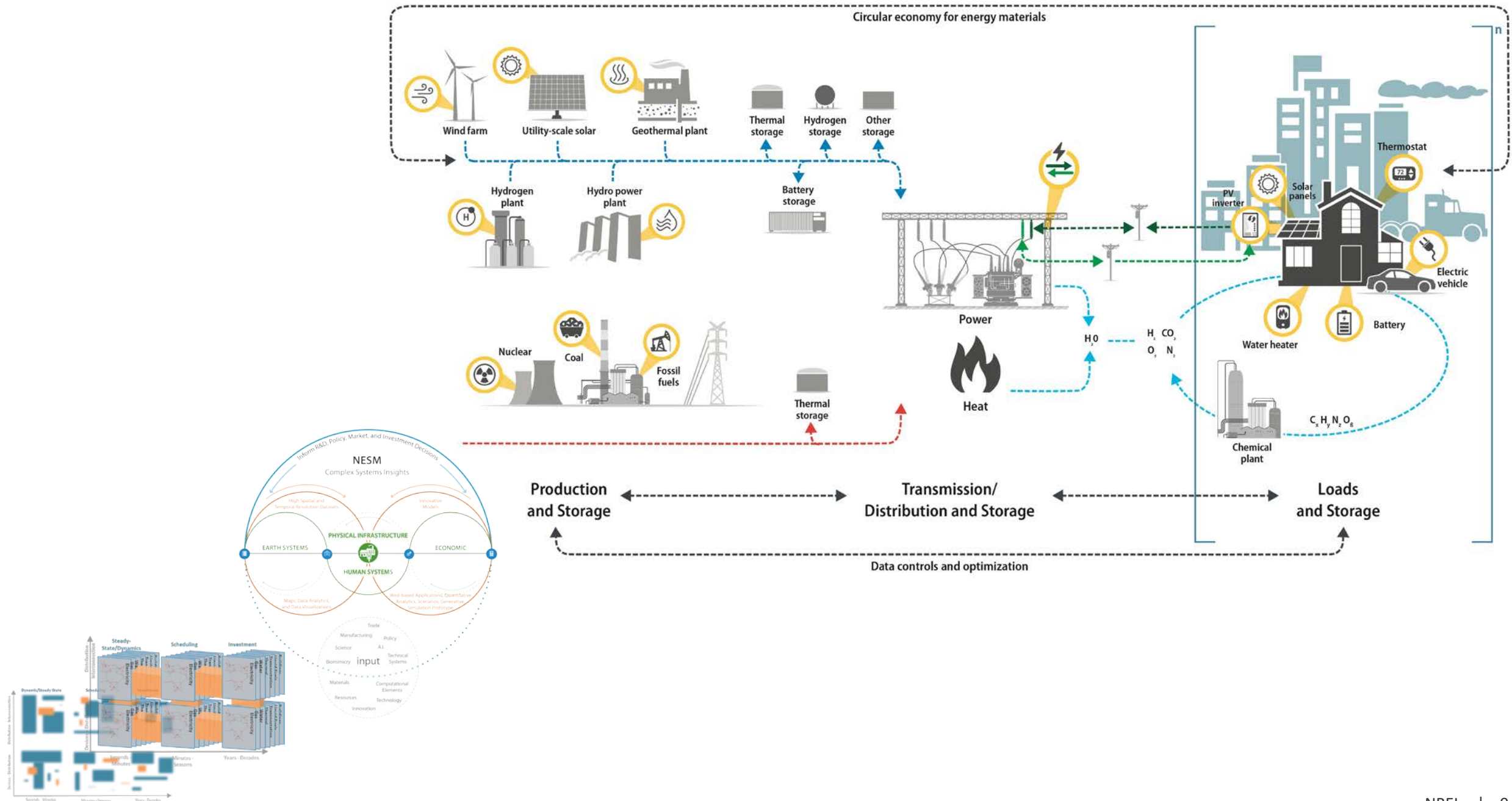




# How we are planning to get there







# Thank you

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[www.nrel.gov](http://www.nrel.gov)

