



# Virtual Utility from Northsea to the river Rhine WP 3



# WP3 - FI Developing B2B electricity eco-system - Building a cross-border Virtual Utility

## Motivations

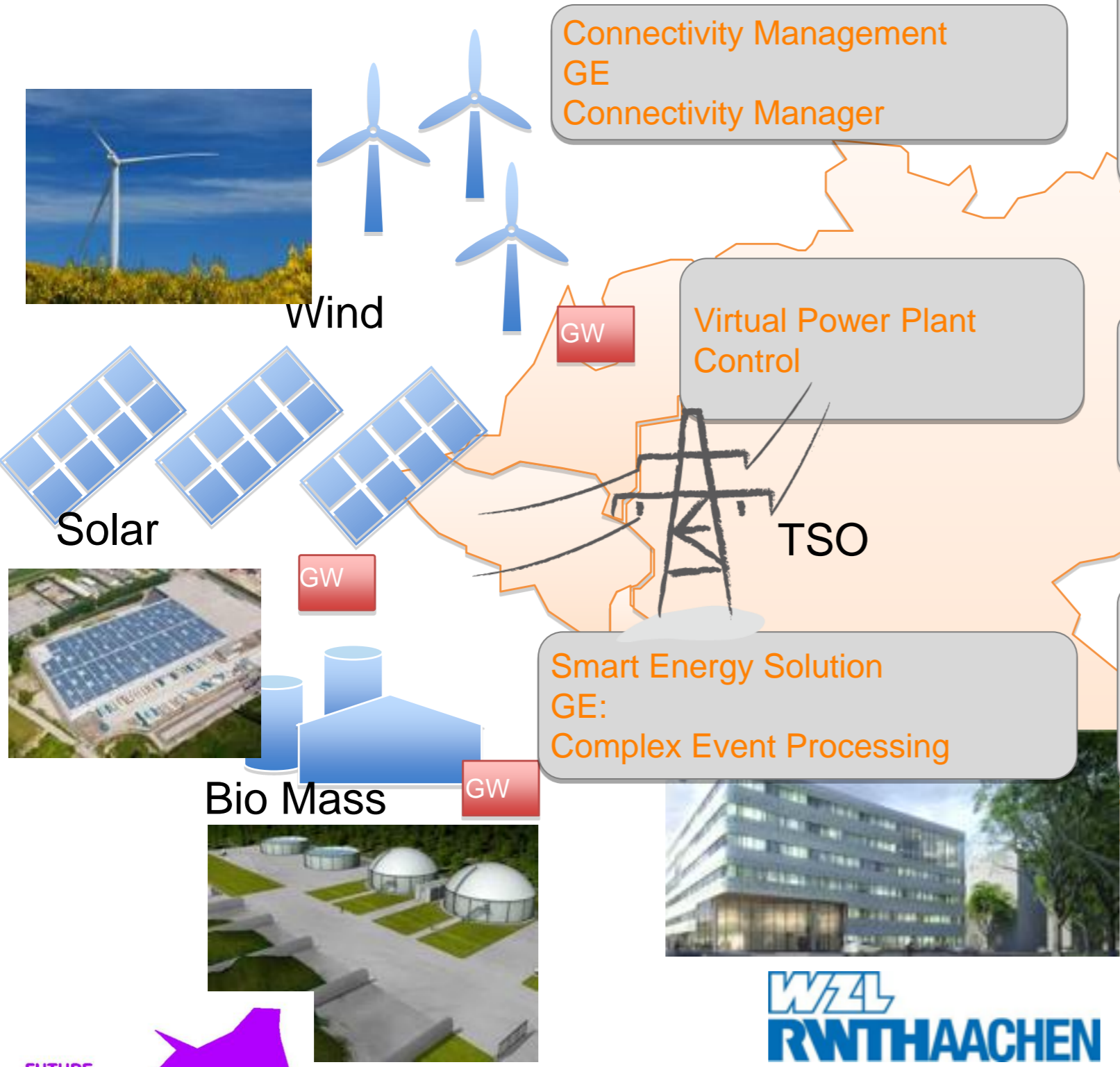
- Combine renewable Energy production with Demand Site Management to a Virtual Utility
- Combine different volatile energy production to guaranteed CO2 free certified energy

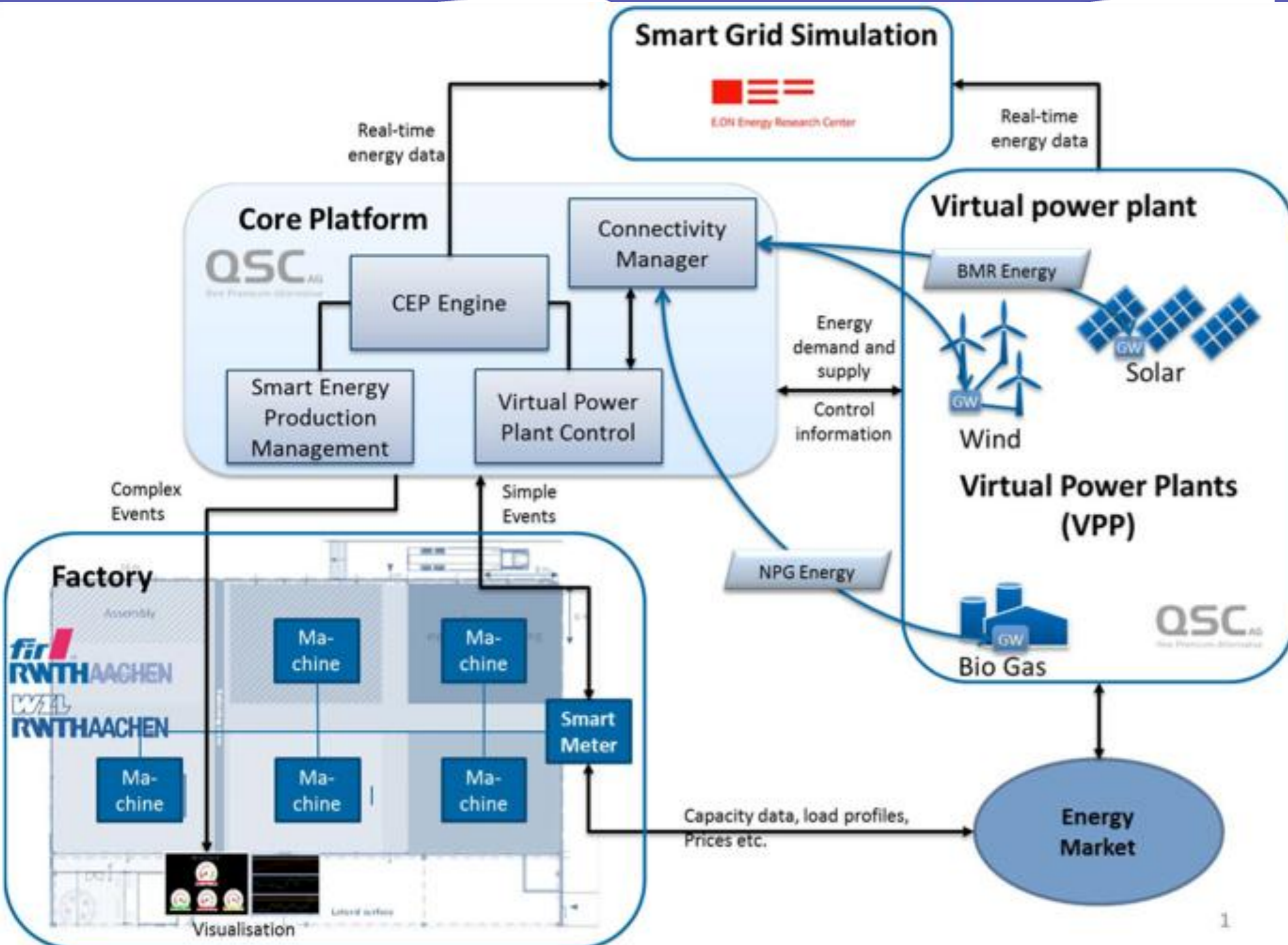
## Objective

- Increase the part of renewable Energy of the consumption of electrical Energy

## Scope

- Trial installation in Belgium and Germany
- ~10 Renewable energy sources
- ~1 Demand Site

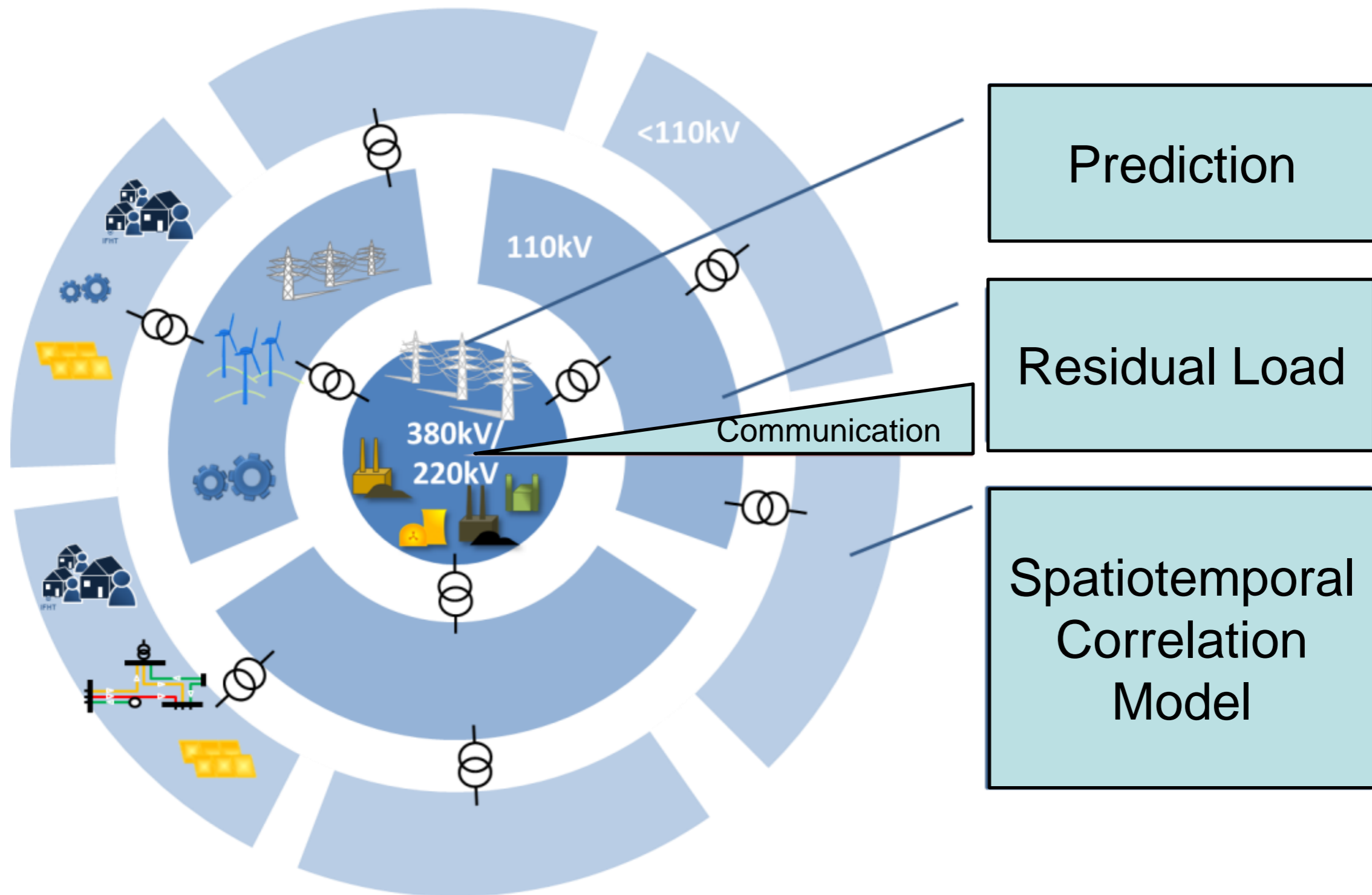




# Smart Grid Interaction

FUTURE  
INTERNET  
SMART  
UTILITY  
SERVICES

FINESCE



# Belgium

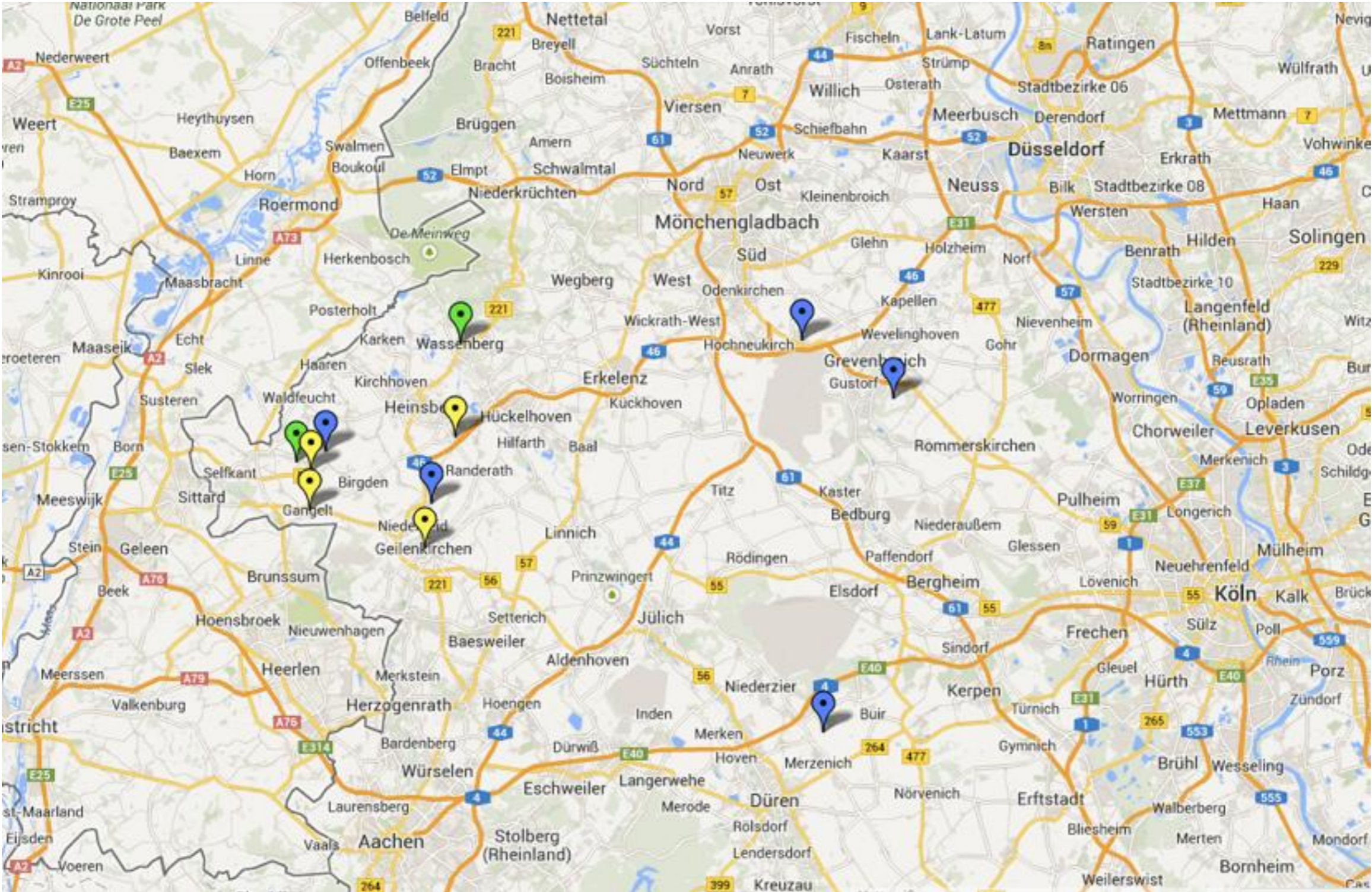
FUTURE  
INTERNET  
SMART  
UTILITY  
SERVICES

FINESCE



# Germany

FUTURE  
INTERNET  
SMART  
UTILITY  
SERVICES



# Constrains Challenge

FUTURE  
INTERNET  
SMART  
UTILITY  
SERVICES



- Real-time
  - End 2 End Data Management
  - Security in critical Infrastructure
  - Production Schedule Aggregation
  - Demand Site Response
- Demand Site Management
  - Energy Schedule Planing
  - Production Process Steering through Energy Production

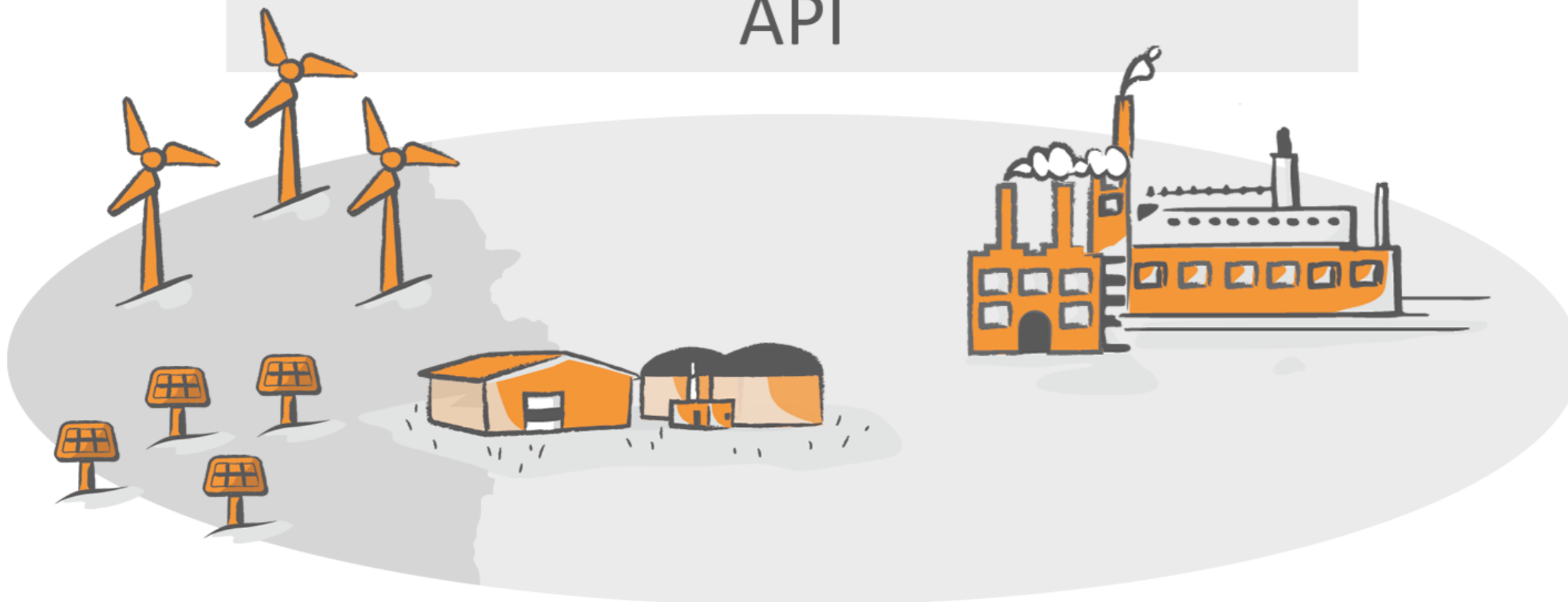
# The Applications I/F for WP 3

FUTURE  
INTERNET  
SMART  
UTILITY  
SERVICES

FINESCE



API





# Ideas for Innovation & Applications

FUTURE  
INTERNET  
SMART  
UTILITY  
SERVICES



- Aggregation of typical Energy Load and Production Profiles
- User-friendly GUI
- Energy efficiency Planner for SME Customer
- Whatever you have in Mind

FUTURE  
INTERNET  
SMART  
UTILITY  
SERVICES



Good-Luck!

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