

# predictive layer

Better prediction, faster, smarter.

## for Utilities & SmartGrids

### Automated Forecasting of Electricity & Utility Systems

#### Energy & SmartGrids Business Challenges :

Energy transition brings more renewable and decentralized productions in a more fragmented market. Enterprise & Residential consumers take control of their consumption, auto-production and competing energy tariffs. New volatility of energy demand and production require more automation to pilot the SmartGrid in its daily operations, maintenance and agility.

***Multi-level automation by anticipation, and short term forecast of the energy system has become a prerequisite for SmartGrids to compete with efficiency, profitability and agility.***

#### Predictive Layer Solution :

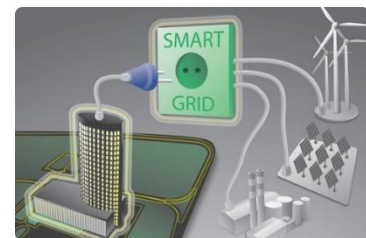
- Automated Load & Net-demand forecasting for high voltage 'distribution' and 'transport transformers'
- Net-Demand & renewable energy forecasts (H-2, D-1, W-1)
- Daily & Intraday system forecast
- Prediction & profiling for network incidents & failures

#### Predictive Layer Technologies:

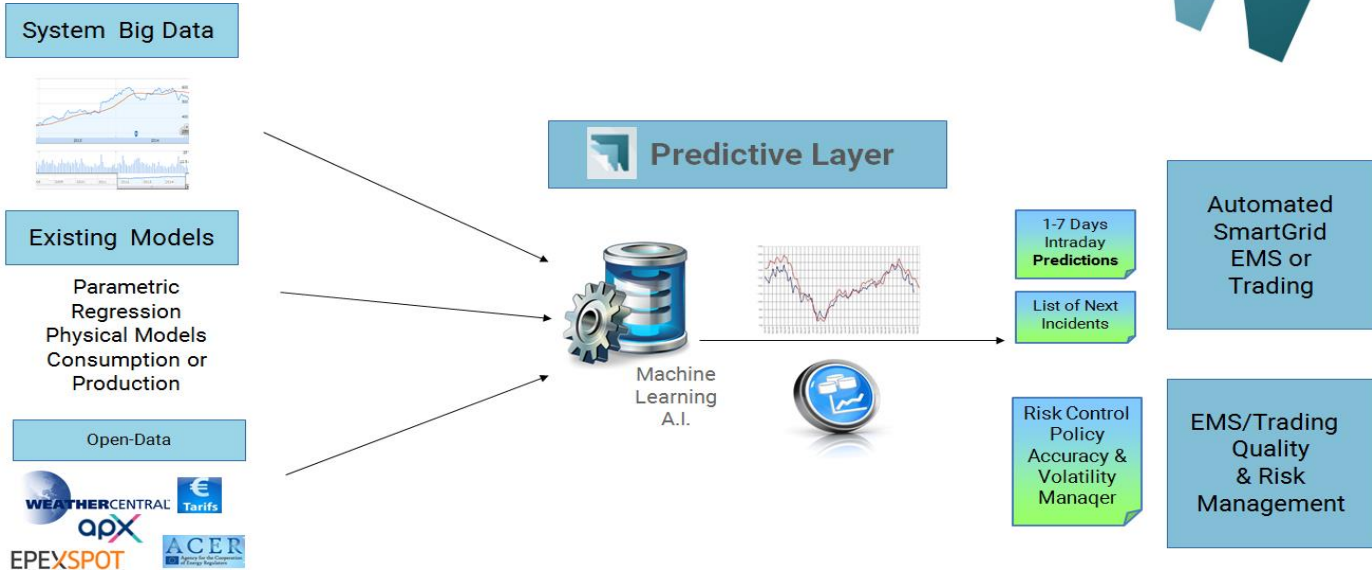
- Automated Machine Learning artificial intelligence
- Automated correlation Private and Open-data
- Accurate forecasts Day-1->D-15, Hour-1->H-18
- Precision & reliability monitoring for risk management

#### Energy SmartGrids Benefits :

- Automation of High Voltage Distribution Network.
- Short-Term balancing & piloting of access network
- Preventive Maintenance to optimize workforce, prioritize Grid's upgrades, optimize processes & Opex
- Profiling Building & Residential consumer usage for recommendation, anomaly detection, auto-production optimization and demand response.



# Predictive Layer for Utilities & SmartGrids



- Automated Machine Learning for high precision & reliability forecast, outperforming by ~35% existing expert models
- Automated correlation of historical records with external Open-Data (including weather, events, regulation signals,...)
- Model fusion to allow multi-experts decision blending
- Enrich existing models with Open-Data and market dynamics
- Automated Modelling for wide deployment in Energy Grid
- IT flexibility to implement artificial intelligent service on in-house Data-Center or in Secured Hybrid Clouds
- Standard APIs to existing EMS Management, SCADA and Risk & Compliance management applications
- Fast Proof of Concept & Pilot to validate immediate ROI
- Performance based pricing



**Only Benefits to Try Predictive Layer !**

