

# The next level of intelligence: Artificial Intelligence


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Due to rounding, numbers presented throughout this and other documents may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.

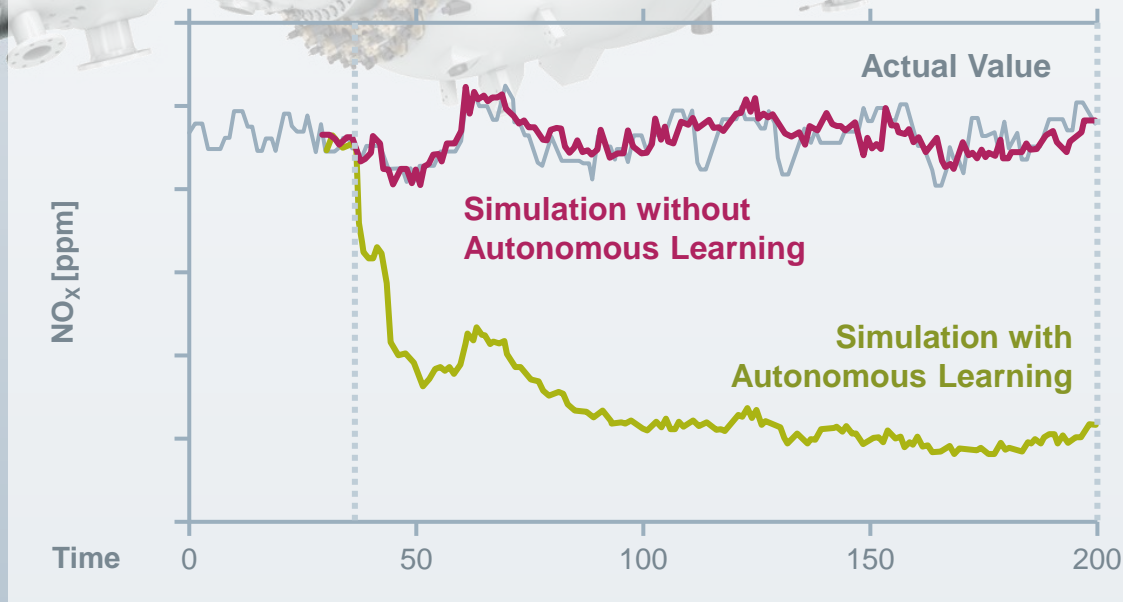


# Behavior predictions with large Neural Networks

- Siemens has been working in the field for more than 30 years
- About 50 key patents for learning processes
- We already use the technology for optimizing complex industrial systems

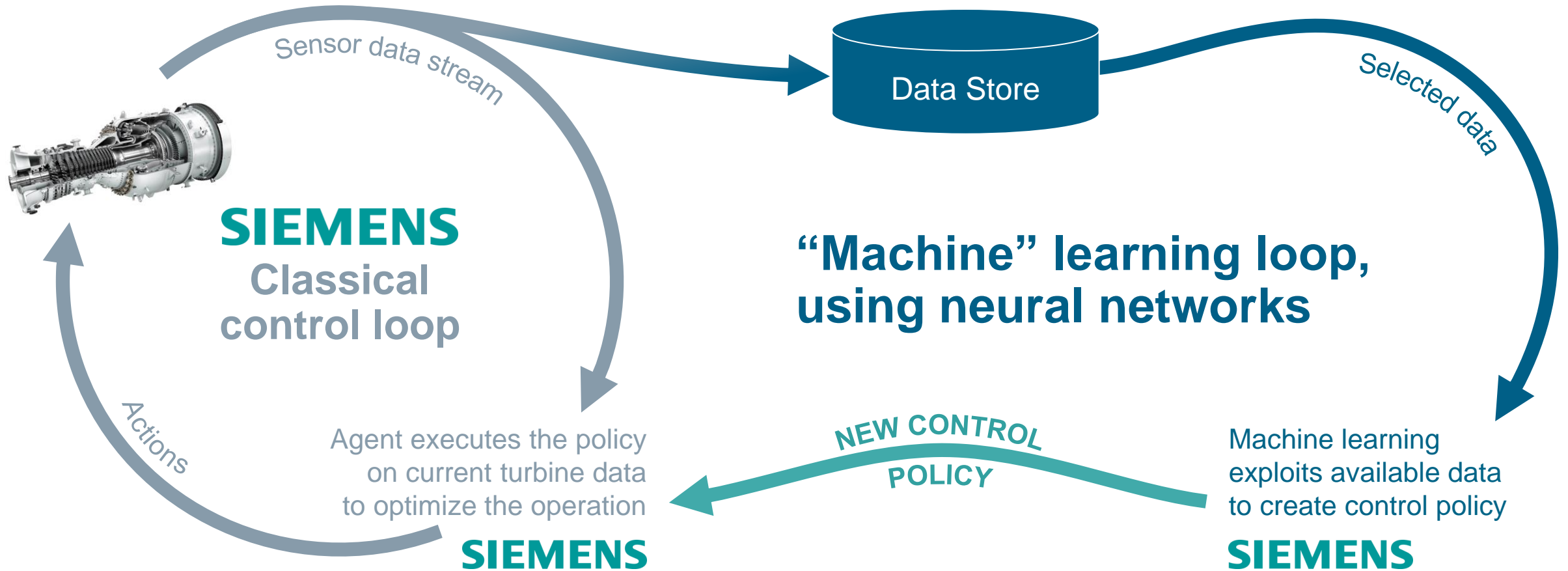
# Self-optimizing turbines

## Reinforcement Learning



- Our AI system learns from the behavior of a gas turbine in operation as well as data from the fleet
- The Artificial Intelligence autonomously lowers the NO<sub>x</sub> emissions

# We use data from operations to adapt and optimize a control policy



- Siemens has been active in the field of Artificial Intelligence for more than 30 years
- We use our experience in an industrial environment with technologies like (Deep) Reinforcement Learning and neuronal networks combined with domain know-how
- Gas turbines, wind turbines or smart grids and medical imaging systems are optimizing themselves through autonomous learning
- Siemens is leading the way on advanced applications of AI in industrial domains