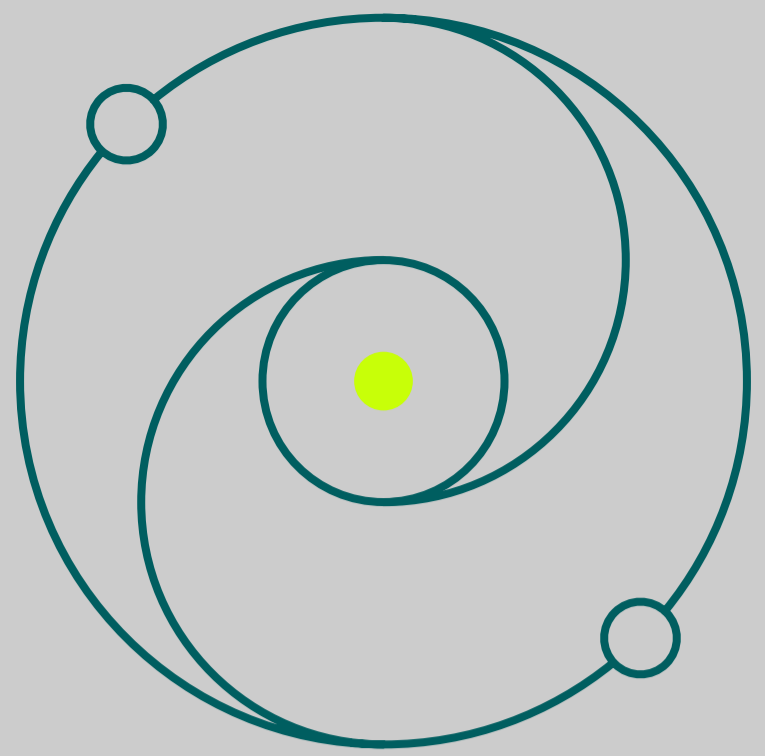


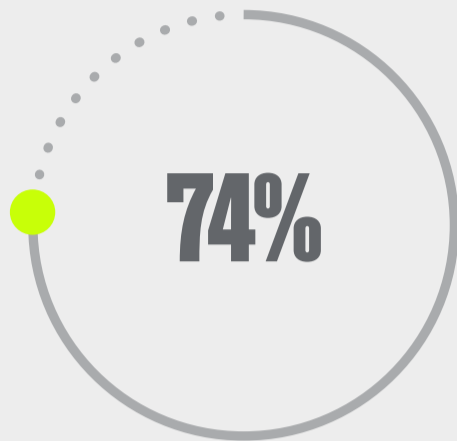
# SMARTER TURBINE TUNING

Artificial Intelligence and Machine Learning (AI/ML) automate gas turbine performance while reducing fuel use and emissions.



## Electricity

In the next 20 years, 74% of new electricity will come from solar and wind. However, these sources are variable, leading to potential gaps. How can you make traditional energy **more agile** and responsive?<sup>1</sup>



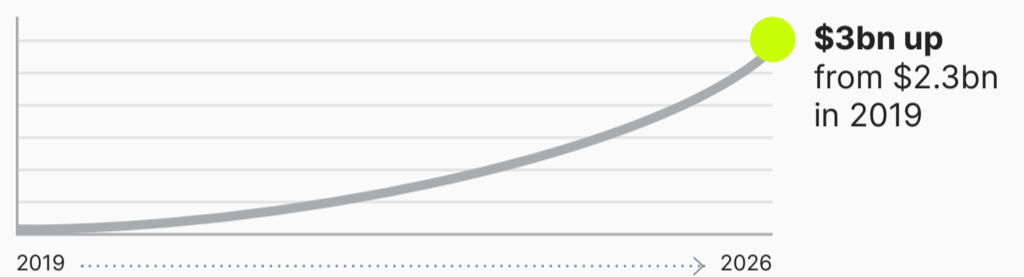
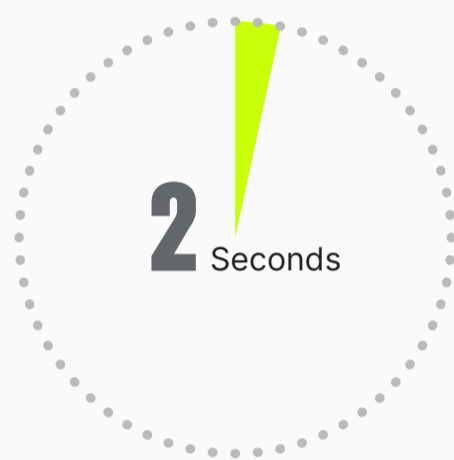
## Start

Aeroderivative turbines can meet power needs in just 5 minutes. While they offer agility, efficiency is harder to achieve. Typically, these turbines need manual seasonal tuning, but our **Autonomous Tuning software** simplifies this.



## Auto-adjustments for optimized combustion

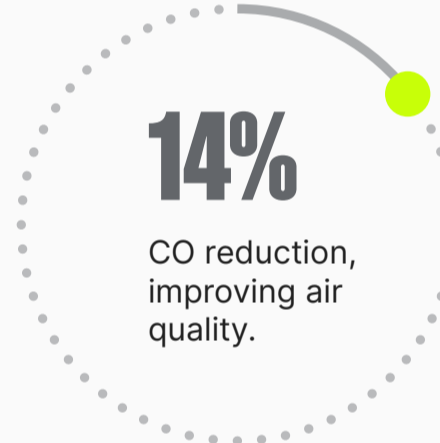
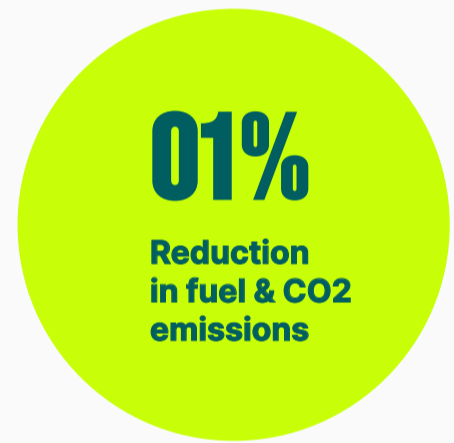
Autonomous Tuning uses AI/ML to send real-time adjustments every two seconds – maintaining ideal flame temperatures and fuel splits.



The aeroderivative turbine market is set to exceed **\$3bn by 2026, up from \$2.3bn in 2019<sup>2</sup>**, fueling a balanced energy transition for power generators globally.

## Significantly reduced fuel and emissions

Driven by our Autonomous Tuning software, power plants can lower fuel consumption and emissions, optimizing energy production for more sustainable operations.

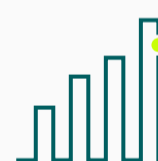


## Customizable automated operations

Build a custom ML model to link and enhance automated operations.



**Learning**  
Explore the space of operation



**Building**  
Develop a tailored ML model using learning data



**Controlling**  
Find optimal operations for current conditions

## Rapid returns

Realize the full potential of your aeroderivative turbine. Cut fuel consumption, emissions, and O&M costs for ROI within a year.

**\$100-500K**

Savings from heat rate optimization, improving efficiency and cutting costs.

**\$117K**

First-year savings by eliminating manual tuning costs and downtime.

**1 MONTH**

Go from integration and setup of Autonomous Tuning to reduced emissions and fuel consumption – with no plant staff input needed – in just one month.

## BOOST

Enhance gas turbine performance while delivering rapid returns. Operate smarter with Autonomous Tuning from GE Vernova.

[Learn more →](#)

## EXPLORE

Read our white paper, **Sustainability & Profitability**, to discover how digital solutions are helping operators balance energy transition demands.

[Download white paper →](#)