

# HOW DATA AND ANALYTICS ARE TRANSFORMING ENERGY AND UTILITIES

## THE OPPORTUNITY

A connected ecosystem generates more data than ever

**1.2B**  
Global Smart Meters  
by 2024<sup>1</sup>

By 2023,  
**75%**  
of utilities assets  
will be digitally  
connected.<sup>2</sup>



INVESTMENTS IN ADVANCED METERING INFRASTRUCTURE (AMI)

**\$145.8B**  
in 2024<sup>1</sup>

OPPORTUNITY:

Continuous improvement and digital innovation could increase profitability by up to

**20%**

by 2021.<sup>2</sup>

## THE SOLUTION

The power of data and analytics

By 2022



**55%**

of utilities will use a core digital platform to automate, optimize, and orchestrate assets, business processes, customers and employees.<sup>2</sup>

By 2020



**65%**

of power, gas, and water companies will have invested in **edge analytics** and computing.<sup>2</sup>

Artificial intelligence will enable water, gas, and electricity companies to reduce revenue losses by

**70%.**<sup>2</sup>



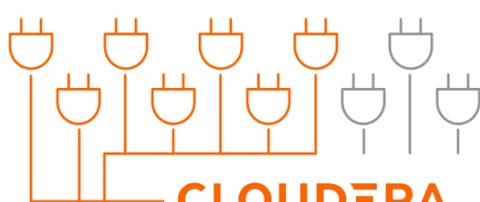
We've completely changed the way to collect, store, search for, identify, and use data to make actionable decisions. What previously took days to develop code, we can now do in minutes.

John Kuchmek, senior technologist, American Water

## RESULTS

Transforming energy and utilities with data and analytics

**7** of the **top 10 utilities** across the globe run on Cloudera



**DUKE ENERGY**

Goal: Protect revenue from theft and malfunctioning and misconfigured meters

DATA ANALYSIS  
TIME TO INSIGHTS  
REDUCED FROM 6 MOS.  
TO LESS THAN AN

**HOUR**

REVENUE PROTECTION  
**TENS OF MILLIONS OF DOLLARS**

by 2020



We were able to use machine learning on billing, smart meter data and other data sets to better understand when we had energy theft issues across our systems.

– Catherine Hope Butler, Duke Energy

Goals: Reduce costs, increase data accuracy with smart metering, and improve customer interactions

**centrica**



**\$55M**

RETURN ON INVESTMENT

COLLECTING & ANALYZING DATA FROM MORE THAN

**2.9M**

SMART METERS

Centrica uses smart meters to monitor consumption in real time to gain visibility into usage patterns and give customers the ability to tailor services to their needs.

**podo**

Goals: Predict power consumption and serve customers in an efficient, customer-friendly way

**40B**

RECORDS ANALYZED

CONSUMER ELECTRIC COSTS REDUCED BY

**30%**



With Cloudera, we can apply big data thinking across the whole company. No decision is taken unless it is backed by data extracted from the platform.

– Alberto Hernández Seco, Technology Manager, Podo

Get more information about [Cloudera for Energy and Utilities](#).

<sup>1</sup> Wood Mackenzie, "AMI Global Forecast 2019-2024: H1 2019", July 23, 2019.

<sup>2</sup> IDC, "Top 10 Worldwide Utilities 2019 Predictions," November 28, 2018.