

Cobalt  
water  
GLOBAL

AI and machine learning for  
sustainable urban water management



**UK water industry sets out plans to be net zero by 2030**

The UK water industry has set a target to become net zero by 2030.

06 March 2020

Rachel Cooper



# The race to carbon neutrality for water utilities.

**New York's landmark climate bill aims for net zero emissions by 2050**

Phil Dzikiy · Jun. 19th 2019 11:59 am ET @phildzikiy

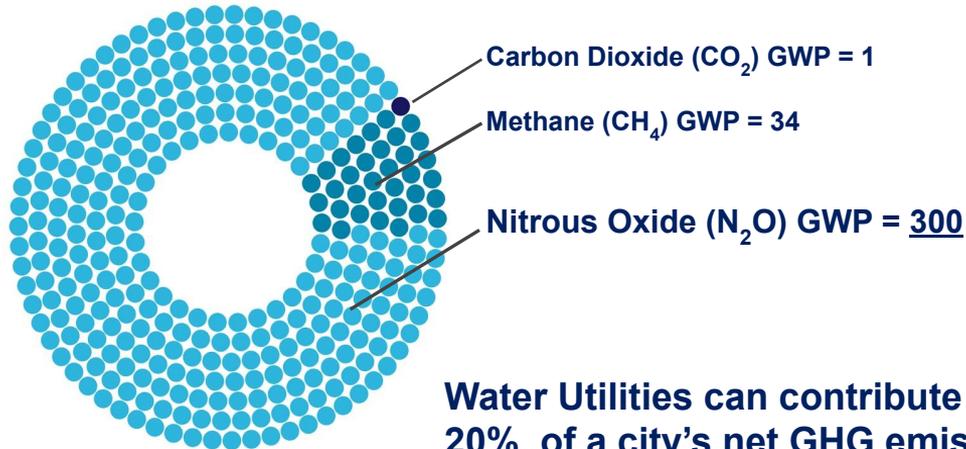
**Melbourne Water's pledge**



*We are committed to reducing our carbon emissions to net zero\* by 2030.*

# Nitrous Oxide ( $\text{N}_2\text{O}$ ) emissions, can make up more than 80% of a Wastewater Treatment Plant's (WWTPs) carbon footprint

## Global Warming Potential (GWP)



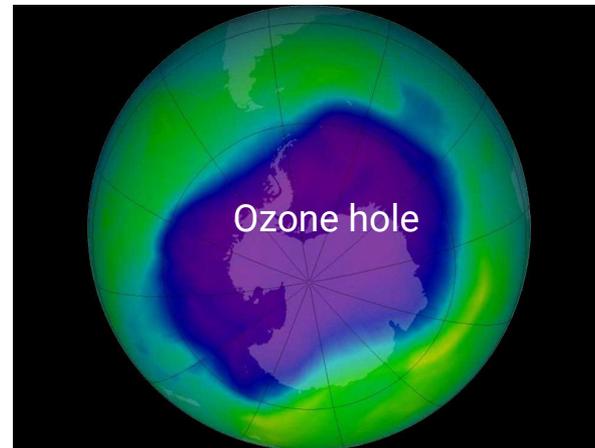
# Reducing (not offsetting) N<sub>2</sub>O saves money and better protects the Planet

Purchasing offsets or investing in renewable energy/energy efficiency to **offset N<sub>2</sub>O emissions** is **more expensive** than actually reducing N<sub>2</sub>O because of N<sub>2</sub>O's high GWP, AND it **does not eliminate N<sub>2</sub>O**

N<sub>2</sub>O not only contributes to global warming, but it is also an **ozone depleter**

Offsetting might cancel out your N<sub>2</sub>O emissions' GWP, but you are paying more money (30% in some cases), while also continuing to deplete the ozone layer

Offsetting only makes sense when there is no other practical solution, **which is no longer the case** for reducing N<sub>2</sub>O from WWTPs because of Cobalt Water Global



# Our Secret Weapon

**The N2ORisk Decision Support System (DSS):** uses AI to combine expert knowledge on N<sub>2</sub>O and machine learning to quickly quantify emissions, optimize the treatment process, and eliminate N<sub>2</sub>O

1

Facility Data

2

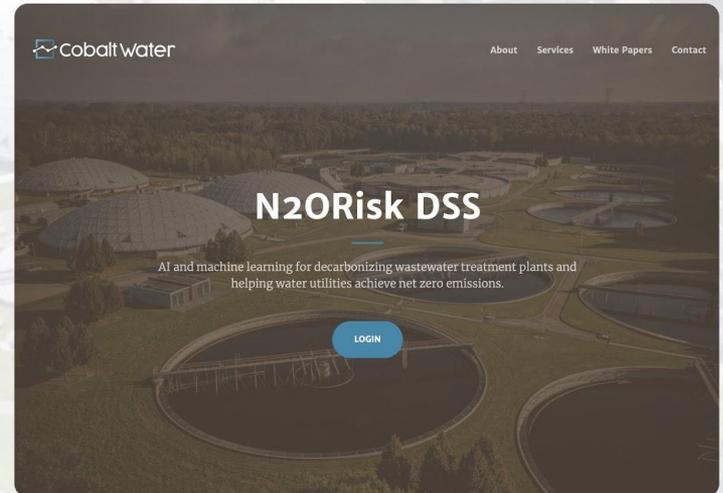
3

Dissolved Oxygen, ammonia, nitrate, pH, COD, etc

N2O risk, emissions, mitigation  
in real-time

N2ORisk DSS

A tech product to scale our knowledge and impact



# Our Solution Delivers Immediate Value and Carbon Mitigation

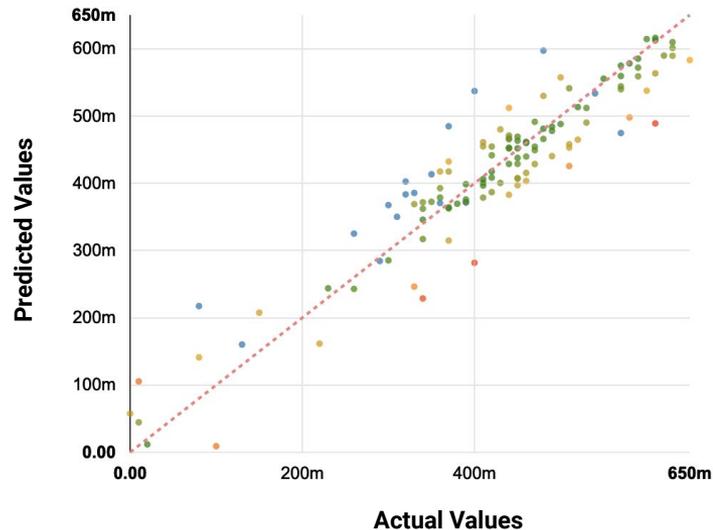
We are the **only** company in the world with a real solution to address  $N_2O$  in AI-based process optimization

In addition to reducing  $N_2O$  our solution provides

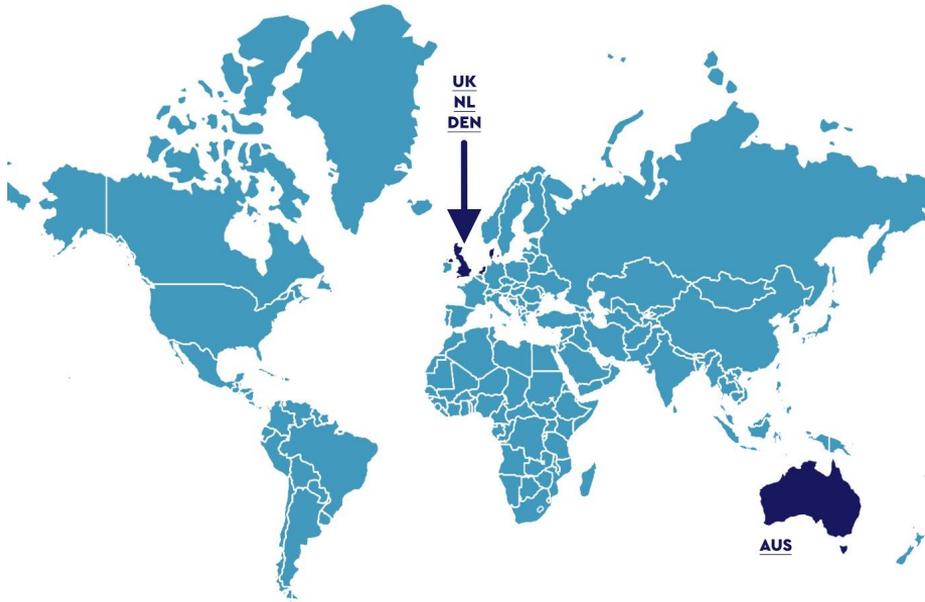
- Easy GHG Reporting
- WWTP performance monitoring
- GHG/Energy/Cost optimization powered by Machine Learning
- Future other AI powered solutions for Water Utilities along with other Industrial Water Needs

Our expertly trained and validated Machine Learning models are very accurate

- R2 Score of **~.9**



# Our Traction



Where we are  
working

**6**  
facilities



- 6 pilots committed in 3 months, which includes enterprise client with **100 plus WWTPs**
- Recently finished Techstars: Demo Day Video [link](#)

# N2ORisk DSS success in The Netherlands

Eindhoven RWZI | Overall WWTP GHG reduction:  
**40%**

Land van Cuijk RWZI | Overall WWTP GHG reduction:  
**70%**

Population:  
**1M**

Projected Savings:  
**\$1M**



# Pricing Model

**Annual Subscription Fee**  
**(based on Products/Services needed)**

**+**

**1 x GHG Reduction Fee**  
**(based on tons of CO<sub>2</sub>e reduced)**

# Founders



**Alex Wolf**

*CTO*

Machine Learning and Software Expert. Recently part of successful AI startup exit.



**Jose Porro**

*CEO*

Top international N<sub>2</sub>O mitigation expert. More than 20 years of water industry experience, PhD research on AI and N<sub>2</sub>O.



**Ingmar Nopens**

*Chief Advisor*

COO of successful water modeling firm. World renowned process modeling researcher and professor.



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Carbon-neutral wastewater treatment is the future, our *N2ORisk DSS* is the future, AI for positive Climate Impact.  
Connect with us and help us ensure clean carbon-free water now!