

A Siemens Company

# Sustainability The Next Evolution in Asset Management

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#### We are



A Siemens Company

The world's smartest asset management solution





## **Asset Lifecycle Management 2.0**



Time

## As-Is (current state)





No Action Taken Fall behind against peers

eula

#### Risk of losing funding



No closer to Net Zero



Multiple methods and calculators means action is stalled.

0

Pressure to deliver with reduced costs still primary driver.

Not tracking carbon means delay in setting baseline.

No baseline means reduction improvements are not included.

Future funding will depend on evidence of carbon consideration.

Risk of greenwashing products Net Zero strategy can not be determined or realised.

No closer to 2030, 2050 UK legislative targets.



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12 July 2021 State of Emergency declared in London Borough Hammersmith & Fulham

4.1m

ANGE ROVER

V999 KGB

#### **12 July 2021 – Record temperature Death Valley**

A medium-rare steak is cooked to an internal temperature of 130-135°F

#### **Climate Change's bad public image**







Assets

#### Data trends

Data trends by type of works, highways activity and by location can be shown in realtime dashboards. Metrics aligned to FHRG guidance note to provide benchmarking data of emissions per mile and per £ spent on highways services

Better understand your greatest contributors and where policy change can make an impact i.e reduce response time to reactive works for better planning.



Traffic Sign/Road Marks





Assumptive model to establish a range of carbon in 'Big handfuls'

Retrospective review of data to provide best case and worse case scenarios.

On the job, what materials are used and waste collected.

Accurate measurement of what was used, variation orders used for more sustainable materials.

While building the work order, provide greener materials or switch out SOR which are carbon heavy.

3. Greener

**Decisions** 

Provide carbon equivalents to bring it to life.



Planning capital works, make decisions based on treatment types and carbon impact.

What if scenarios to measure cost and carbon profiles.



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While building the work order, provide greener materials or switch out SOR which are carbon heavy.

Provide carbon equivalents to bring it to life.

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**17 Jobs** Planned CW 12 months

#### 15.74 tCO2e

Less Actual Materials than ordered

260

Seedings grown for 10 years Content of

**1/3 tCO2e** Going to landfill

'About 5-10 billion ton of CO2 need to be removed annually until 2050.'

Gartner





Planning capital works, make decisions based on treatment types and carbon impact.

What if scenarios to measure cost and carbon profiles.







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# "You can't manage what you don't measure." 0

Peter F. Drucker



#### **Pothole data**

• Link



Year of Defect	January	February	March	April	May	June	July	August	September	October	November	December
2020							1990			1.251	1.185	0.689
2021	3.779	4.970	4.191		3.733		4.254	4.942	5.369	4.859	4.687	4.782
2022	2.863	2.496	2.447	3.999	2.779	2.303	4.058	3.198	3.296	0.598		

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#### **Pothole data**

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Link ٠

#### Brightly Pothole Carbon Report

Wiew: Original



Year-on-year Comparison

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🖵 Data Guide 🛛 💿 Watch 🔻

≪ Share

#### **Pothole data**



## **Tennis court or Rugby pitch?**

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**Baseline** 



## **To Be (Future state)**

#### Carbon Tracked



Operational carbon tracked alongside dayto-day work

Every £1 spent is spent in the most valuable way



#### **Benchmarked** against peers

Open and trusted carbon numbers comparable with peers

**~** 

No risk of greenwashing



#### Funding secured

Evidence available for **~** greater funding opportunities based on data results

#### Targets met

Month-on-Month comparisons of carbon reductions

Year-on-year commitment realised





