

measurable•energy

# The measurable.energy (m.e) Platform

**Eliminating Wasted Energy**

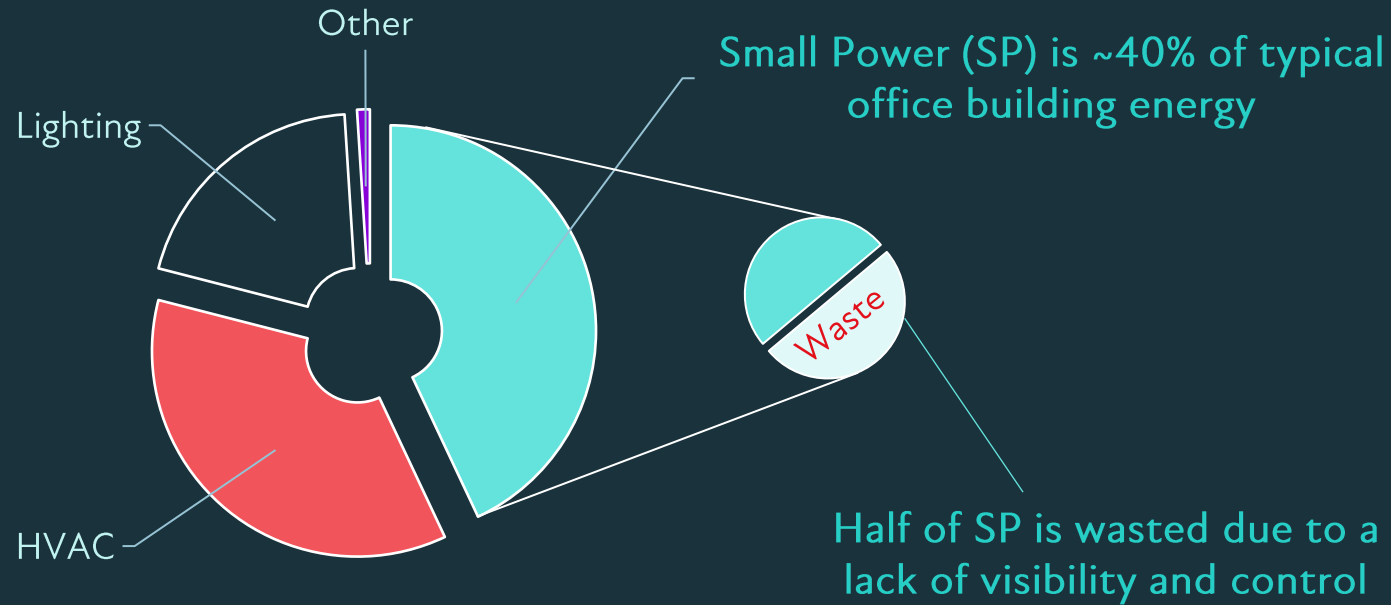
Measurable Ltd  
January 2023 Version 2.0



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# We live and work in a world of wasted energy



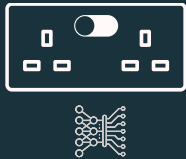
Accounts for ~20% Wasted Energy building wide



## m.e Platform.

Automatic machine learning-driven identification of small power energy waste more.

### m.e.PowerSocket



a new standard for power sockets with edge-based Machine Learning



### m.e Cloud



Secure, cloud based infrastructure



### m.e Machine Learning

To identify waste and anomalies



### m.e SP Data

Unique energy insights



### m.e Software UI



Analytics, goal setting, and automated control to fleets of Sockets

### m.e Secure API



Interfaces to Demand Side Response, Building Systems, Generation etc..



## m.e Power Socket:

- Real-time monitoring at 3Hz (energy, voltage, current, power factor, frequency, active power, reactive power)
- Control groups or individual sockets remotely
- Machine Learning device ID
- Data encryption and transmission over Wi-Fi
- Button and NFC 'Tap for power' override
- m.e Impact Indicator light (energy cleanliness)
- Multiple socket sizes/types that are CE & British standard certified
  - Fused Connection Unit - Q1 2023
  - European Type F – Mid-2023
  - Industrial Socket – Late-2023





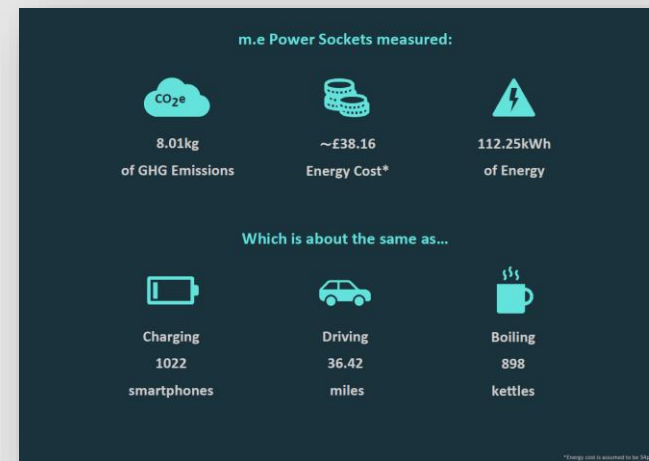
# m.e HUB

- Visualization of all energy use, carbon emissions and carbon intensity
- Device IDs and Status – On/Off/Standby
- Identification of wasted energy
- Hot Spot analysis to identify electricity waste, behaviours, power problems or faulty devices
- Preventive maintenance engine and alerts
- Prevent device types or profiles from drawing power
- Seasonal/weather driven device profiling
- Full automated energy, cost, carbon reporting suite right down to device level
- API interface for simple integration into external Building Management Systems (BMS)

## m.e Hub Desktop Version



## m.e Hub Output Customer Reports





## m.e Virtual Load (DSR)

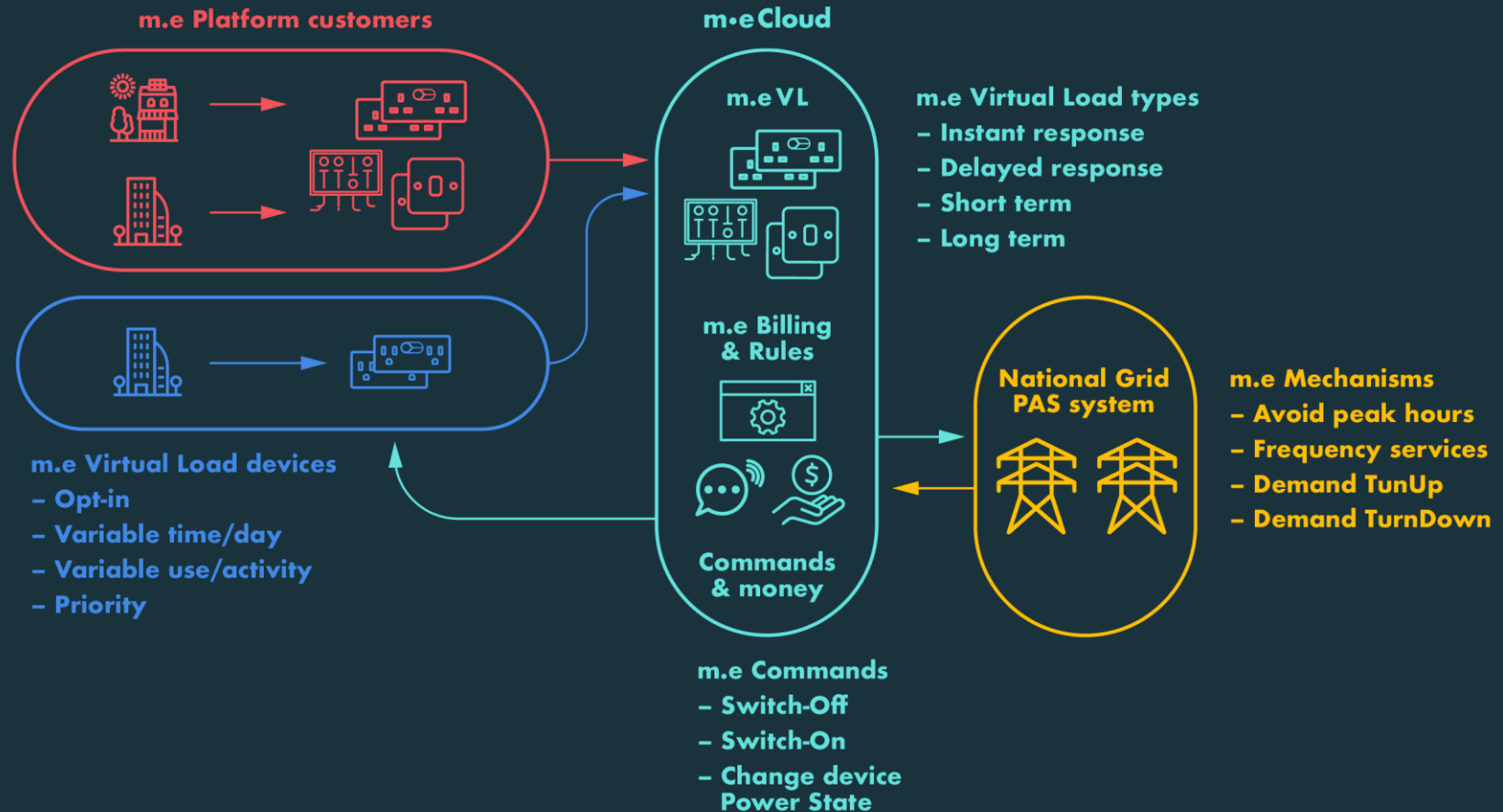
A collection of m.e Power Sockets that are able to be controlled by the Grid operator for balancing and demand control.

### Save Money

- Avoid transmission and distribution costs at peak times
- Savings can be significant

### Make Money

- Provide 'balancing' services through intelligent use of energy.
- Savings returned to the Platform owner





## Successful Pilots & Active Customers



60% reduction in  
small power  
energy cost on  
portable buildings



42% reduction  
in emissions,  
35% reduction  
in small power  
energy cost



24% reduction  
of small power  
cost and  
emissions  
eliminated  
across only 30%  
of devices

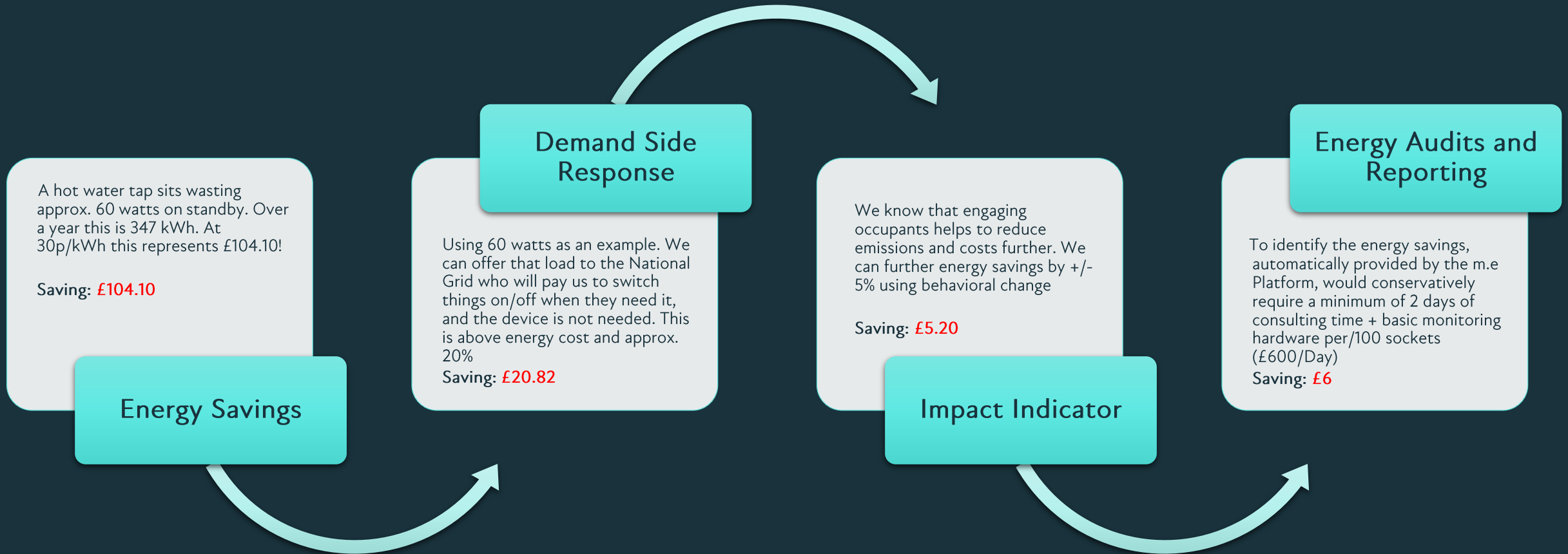
**PUBLIC**

36% reduction in  
small power costs  
and emissions





## m.e Platform Payback





## m.e Typical Device Savings

| Plug in Device     | Energy Saving | DSR     | Impact Indicator | Energy Audit | TOTAL            |
|--------------------|---------------|---------|------------------|--------------|------------------|
| Hot Water Tap      | £104.10       | £20.82  | £5.20            | £6           | <b>£136.12</b>   |
| Monitor            | £15.77+       | £3.15   | £0.70            | £6           | <b>£25.62</b>    |
| Commercial Printer | £34.56+       | £6.91   | £1.72            | £6           | <b>£49.19</b>    |
| TV                 | £44.91+       | £8.98   | £2.24            | £6           | <b>£62.13</b>    |
| Electric Heater    | £1,737        | £347.40 | £86.85           | £6           | <b>£2,177.25</b> |



## m.e Platform. The Numbers



£22.50 per Double Socket



£1.25 per Socket/month

| Sockets                       | 100   | 1,000  | 10,000 |
|-------------------------------|-------|--------|--------|
| Year 1 Cost                   | £3.8k | £38k   | £375k  |
| Cost/year from year 2         | £1.5k | £15k   | £150k  |
| Cost (£) Savings/year         | £6k   | £37k   | £365k  |
| Energy (kWh) Reduction/year   | 15k   | 84k    | 811k   |
| CO2e (tonnes) Eliminated/year | 3.4 † | 19.6 † | 190 †  |
| Payback in months             | 8     | 13     | 13     |

With DSR enabled & Electricity Price = Avg 30 p/kWh

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Join the conversation at **#StopWastingEnergy**

**Want to learn more?**

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