



WORKPLACE HYGIENE MONITORING SYSTEM

Higher cleaning standards Lower costs

Fully integrated technology
solution for workplace hygiene

SEPTEMBER 2021



The Problem

Commercial cleaning is essential, but highly labour-intensive.

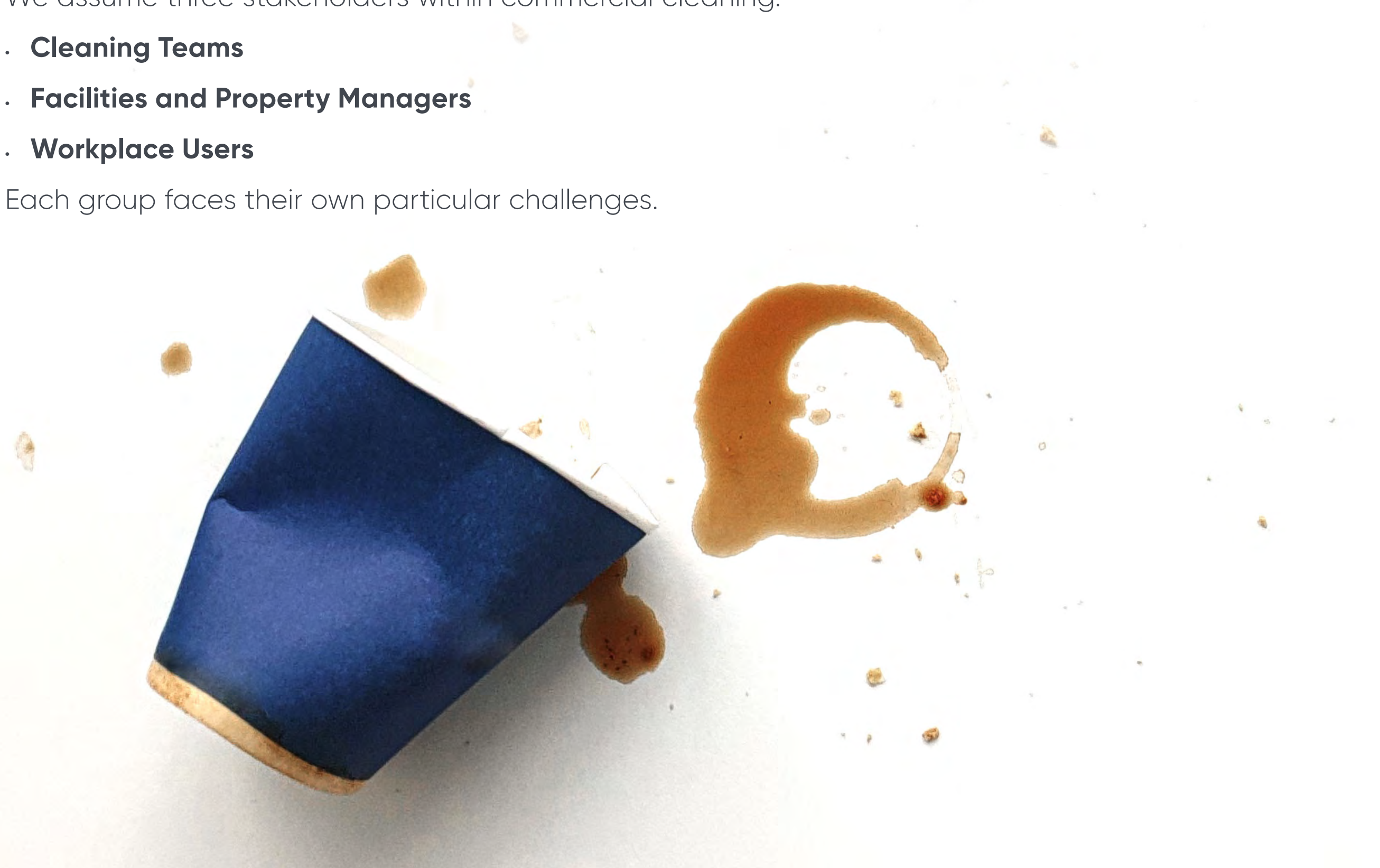

Currently, to improve cleaning standards requires more cleaning hours, thereby increasing cleaning costs. Or put another way, to lower cleaning costs you must be prepared to accept lower hygiene standards.

However, there are many inefficiencies in the current commercial cleaning processes.

We assume three stakeholders within commercial cleaning:

- **Cleaning Teams**
- **Facilities and Property Managers**
- **Workplace Users**

Each group faces their own particular challenges.

Users

Poor workplace environment
Lack of assurance on workplace hygiene
Disenfranchised users mistreat facilities

> 53% of users say there is room for improvement in their workplace cleanliness
(PEGO Market Research)



Managers

Lack of data on the status of facilities
Difficulty in benchmarking cleaning services
Constant need to balance quality and cost

£280 Average annual cleaning cost per employee in London offices
(PEGO London City Case Study)



Cleaning Team

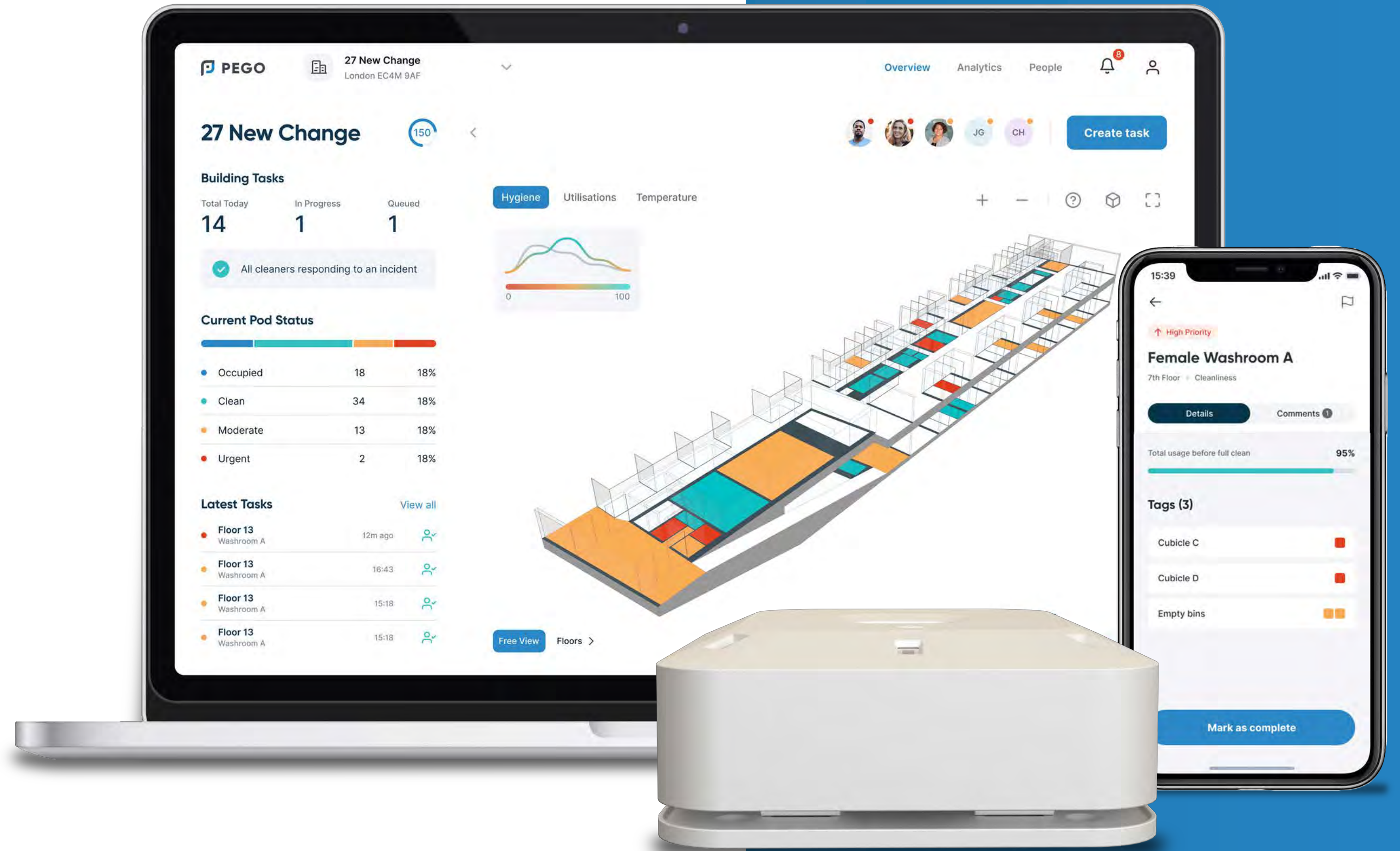
Essential workers
Hard work often goes unrecognised
Lack of incentives to be productive

£17,000 Annual average wage for cleaning operatives in the UK
(Indeed.com January 2021)

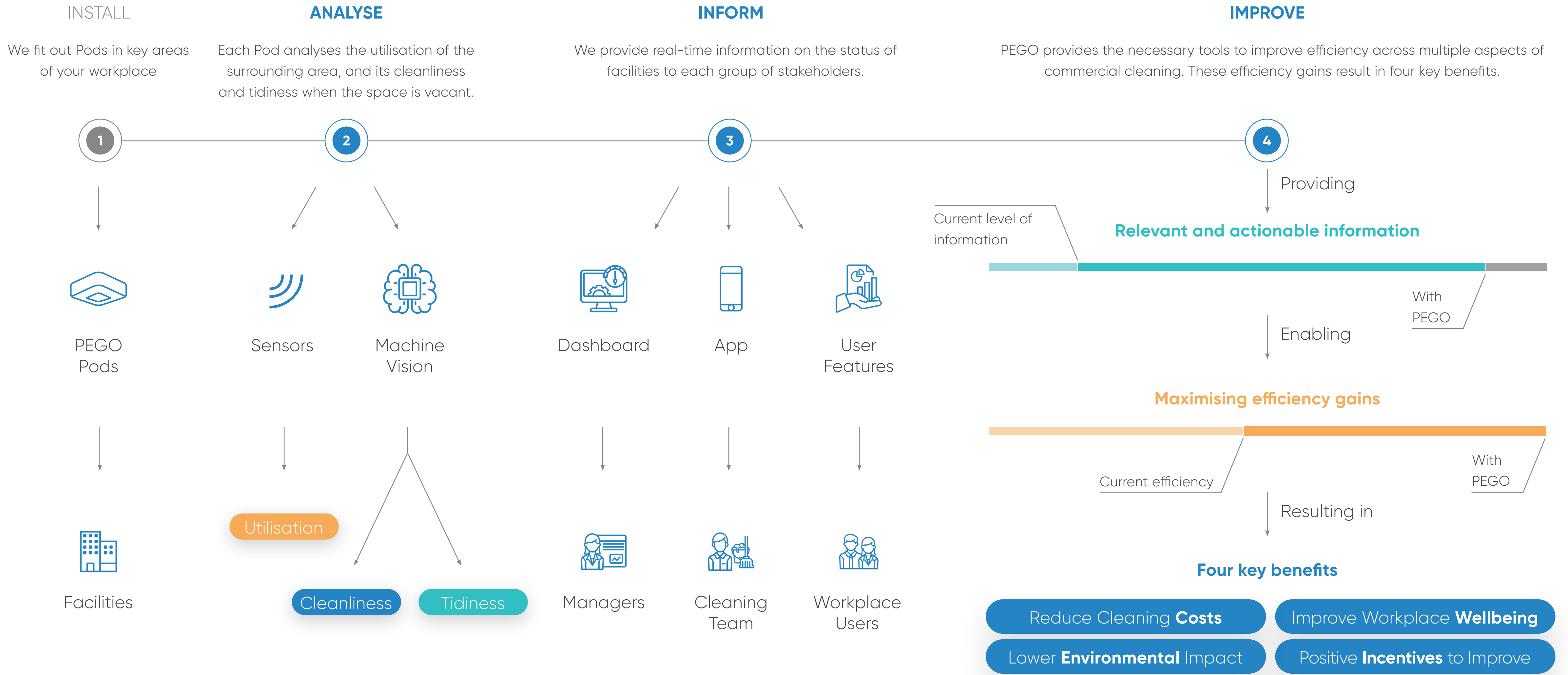
The underlying problem is the lack of relevant, accurate and real-time information, which affects all stakeholders.

THE SOLUTION

PEGO Hygiene Monitoring System



How it Works



ANALYSE

The PEGO Pod

The Pod contains an array of sensors that monitor human presence, providing a very sensitive and accurate reading of footfall. It also houses the Machine Vision and Artificial Intelligence modules, which run the cleanliness and tidiness analyses, when the space is vacant.

A Pod cannot carry out machine vision readings when a person is present, under any circumstance, including malfunctioning, power failure, or malicious attack.



Ceiling mounted on a bracket, it is retrofittable with minimal work.

Powerful Artificial Intelligence software running locally on each Pod.

Can control external devices such as lights, and aroma dispensers.

Dimensions: 12cm x 12cm x 5cm

Connected via Wifi, Ethernet, or 4G, with low band width requirements.

Remains operational even if temporarily offline.

Multiple human detection sensors, utilising complementary technologies.

Physical shutter keeps machine vision components enclosed whenever there is a person in the vicinity.

Machine vision only operates when space is vacant

Cannot collect any personal data

What the Pod Analyses

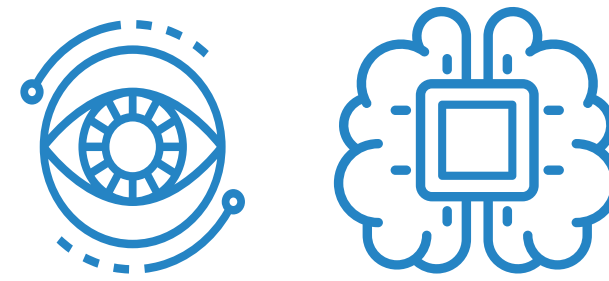
UNIQUE TO PEGO



Area Motion & Human Presence Scanners

Space Utilisation

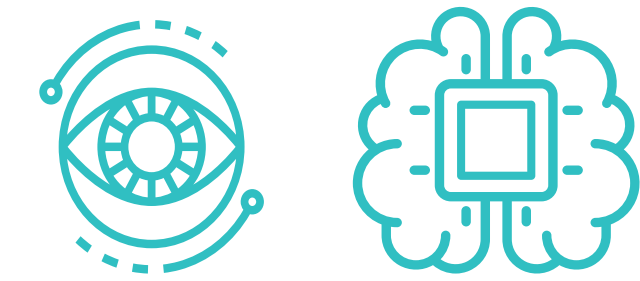
- Fully anonymous
- Location utilisation
- Precise location



Machine Vision & AI

Cleanliness Monitoring

- Analyses area under the Pod
- Automatically rates incidents
- Very high resolution
- Checks cleaning operations
- Constantly improving algorithm



Machine Vision & AI

Tidiness Monitoring

- Learns the tidied status of each room
- Identifies misplaced objects
- Detects foreign objects
- Identifies missing objects



PEGO HYGIENE METRICS

INFORM

Dedicated Tools for Each Stakeholder



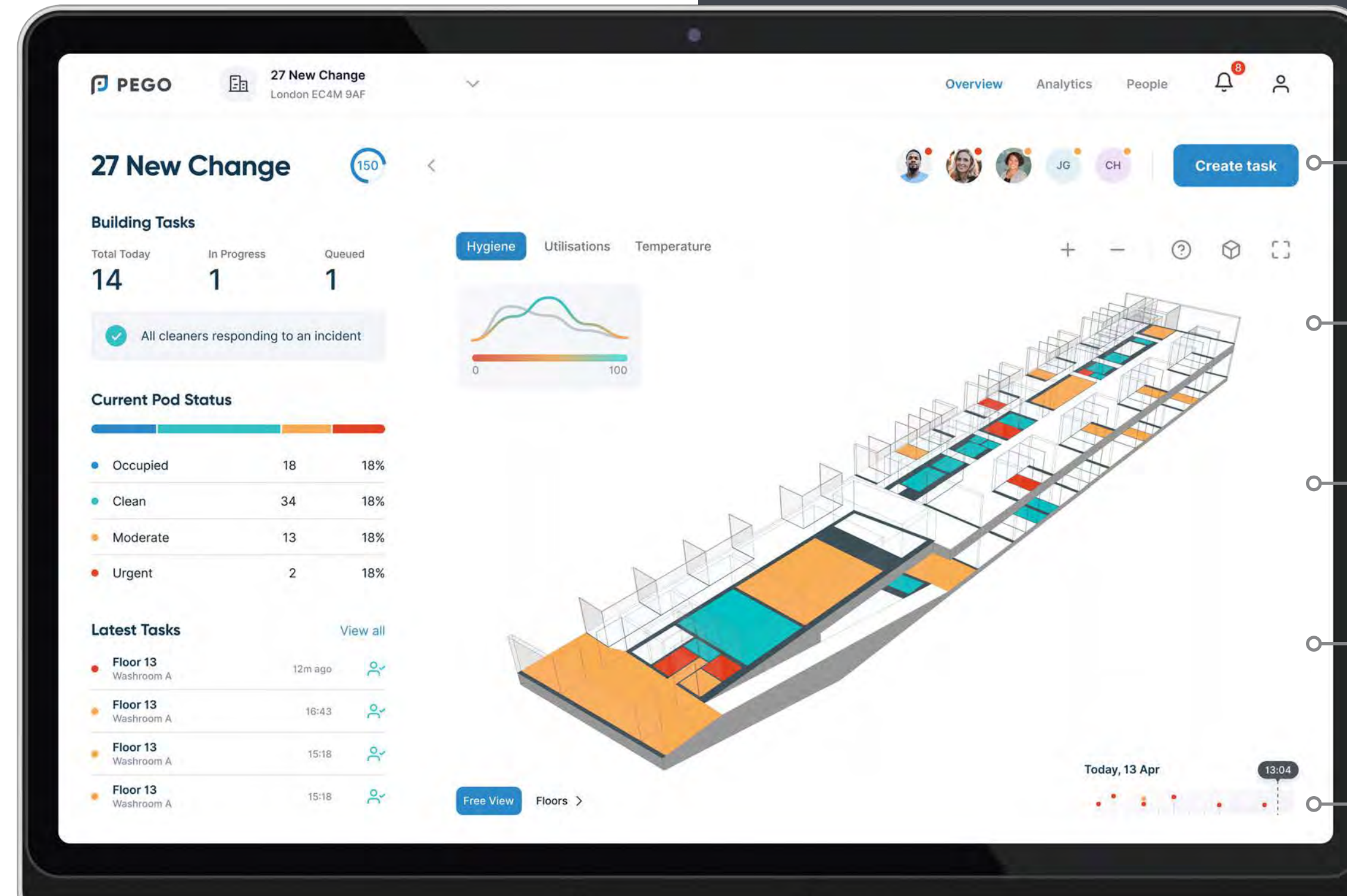
Dashboard



Managers

PEGO's Dashboard has different versions, tailored for Property Managers, Facilities Managers, and Cleaning Supervisors.

The Dashboard has a full set of comprehensive data, displaying real-time status of all your devices, hygiene metrics, and many other reports.



Comprehensive data

User-friendly, customisable and actionable interface

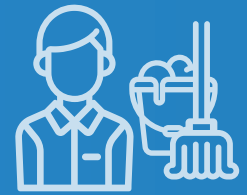
Powerful analytical tools

API for extracting and integrating data with your internal systems

Key performance metrics

- Real-time information on the status of your facilities
- Identify ways to improve resource allocation and efficiency
- Full audit of hygiene and cleaning operations

App

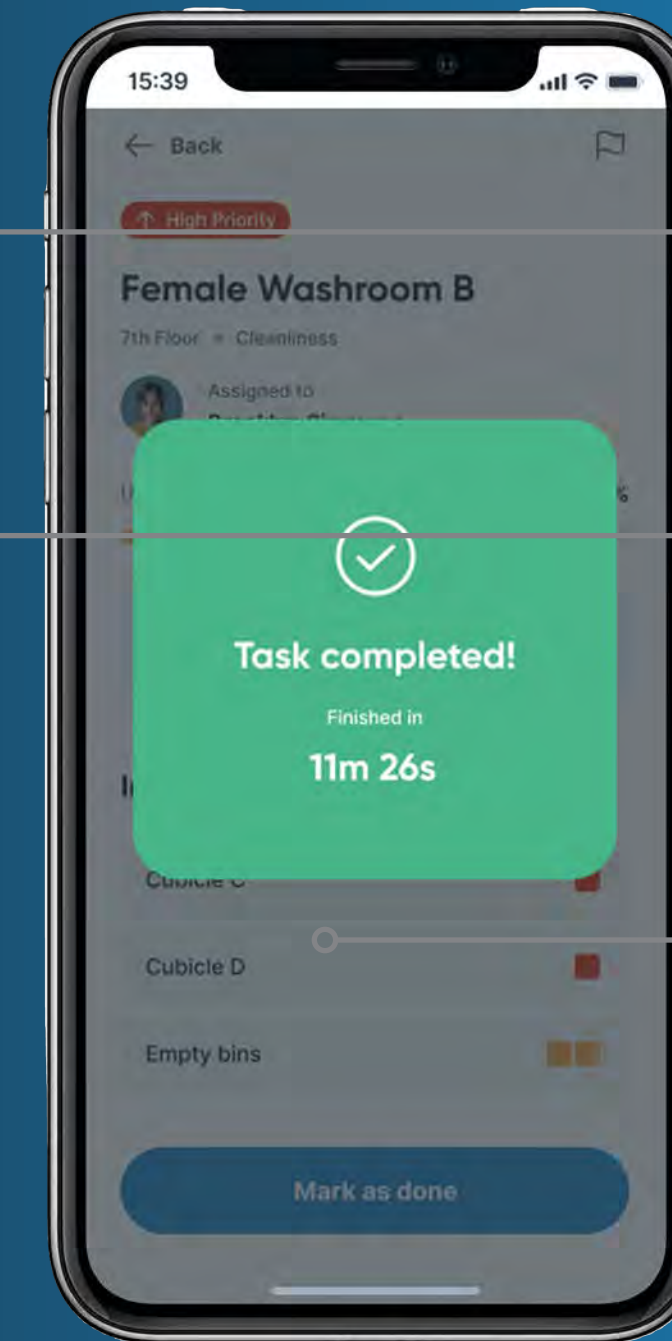
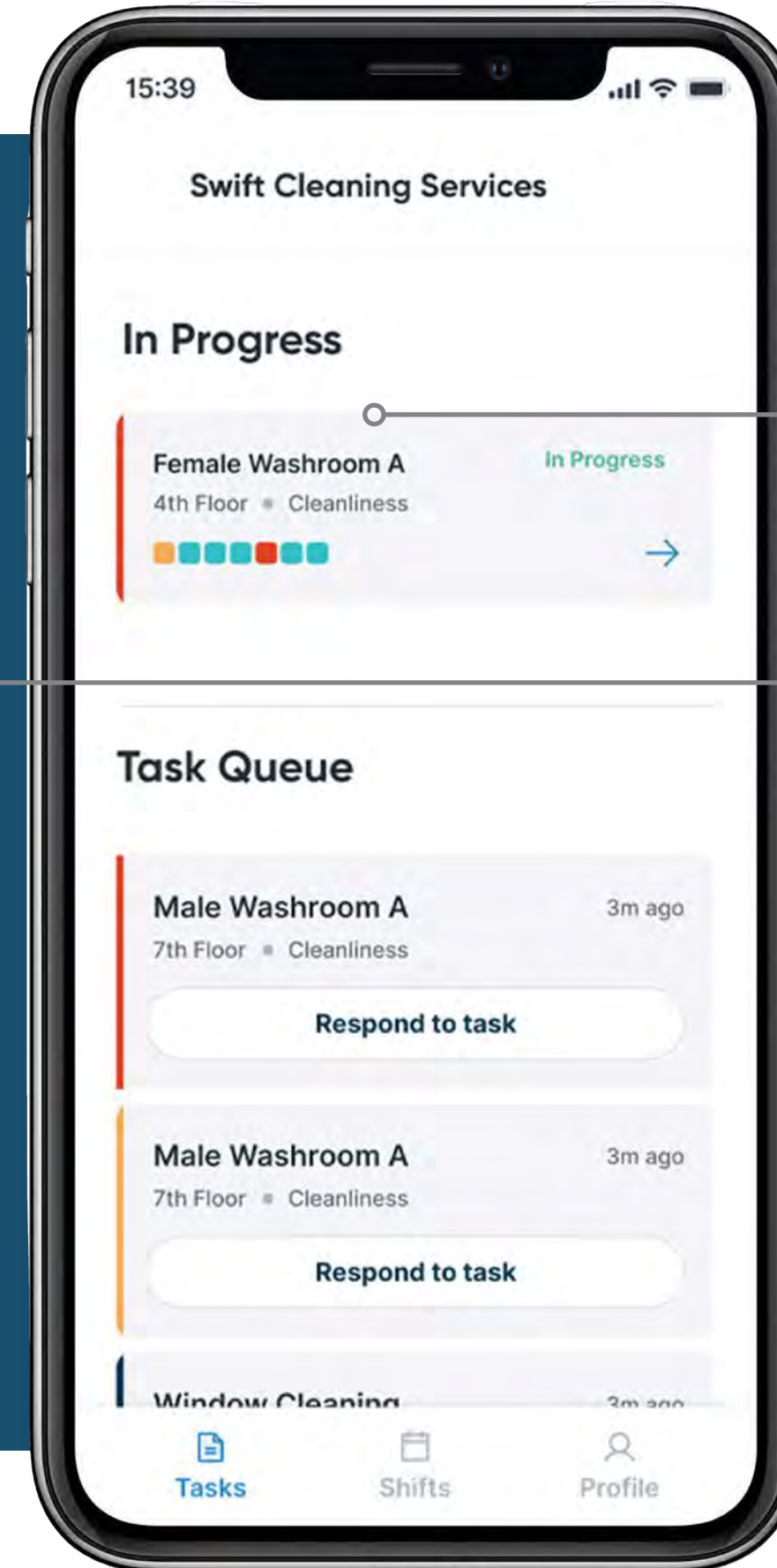
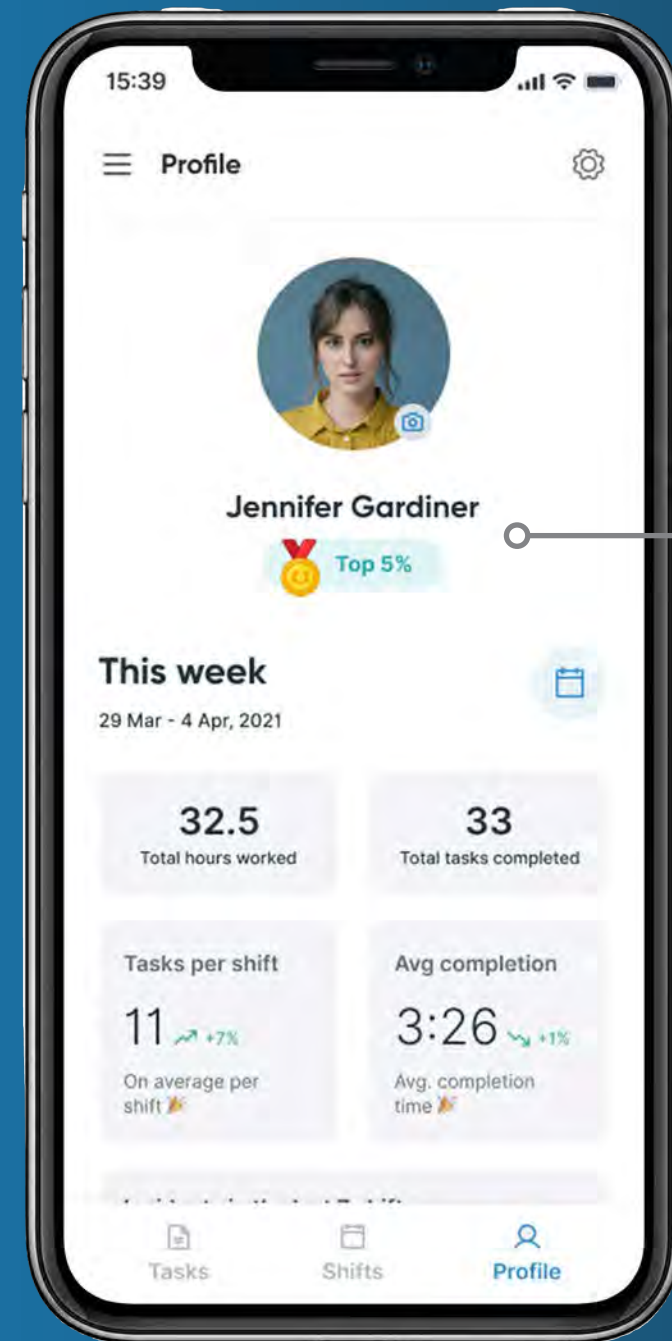


Cleaning Team

The App provides Cleaning Operatives with a user-friendly tool to maximise their efficiency.

The App presents each Cleaning Operative with a sequential list of tasks, in order of priority. These include live notifications about locations that require attention, as well as routine tasks. Priorities are automatically updated in real-time.

Once a Cleaning Operative marks a task as completed, the PEGO System automatically performs quality assurance of the work carried out.



Real-time alerts and prioritisation

Keeps log of cleaning activities

Automated workflow for cleaning team

Enables targeted cleaning
Optimised resource allocation

Eliminates need for manual inspections
Keeps track of performance

User Features



Workplace Users

PEGO is a unique solution in the market providing Users with real-time information about the hygiene of their workplace.

Our traffic lights can be connected to the PEGO System to notify Users of the status of specific locations, such as washrooms and meeting rooms. We also offer the option to integrate PEGO Hygiene Metrics in workplace user experience applications.

These features promote awareness and engagement.

This engagement and the higher cleaning standards enabled by PEGO, generate a positive feedback loop, whereby Users tend to be more mindful of the way they treat their workplace.



IMPROVE

The Benefits



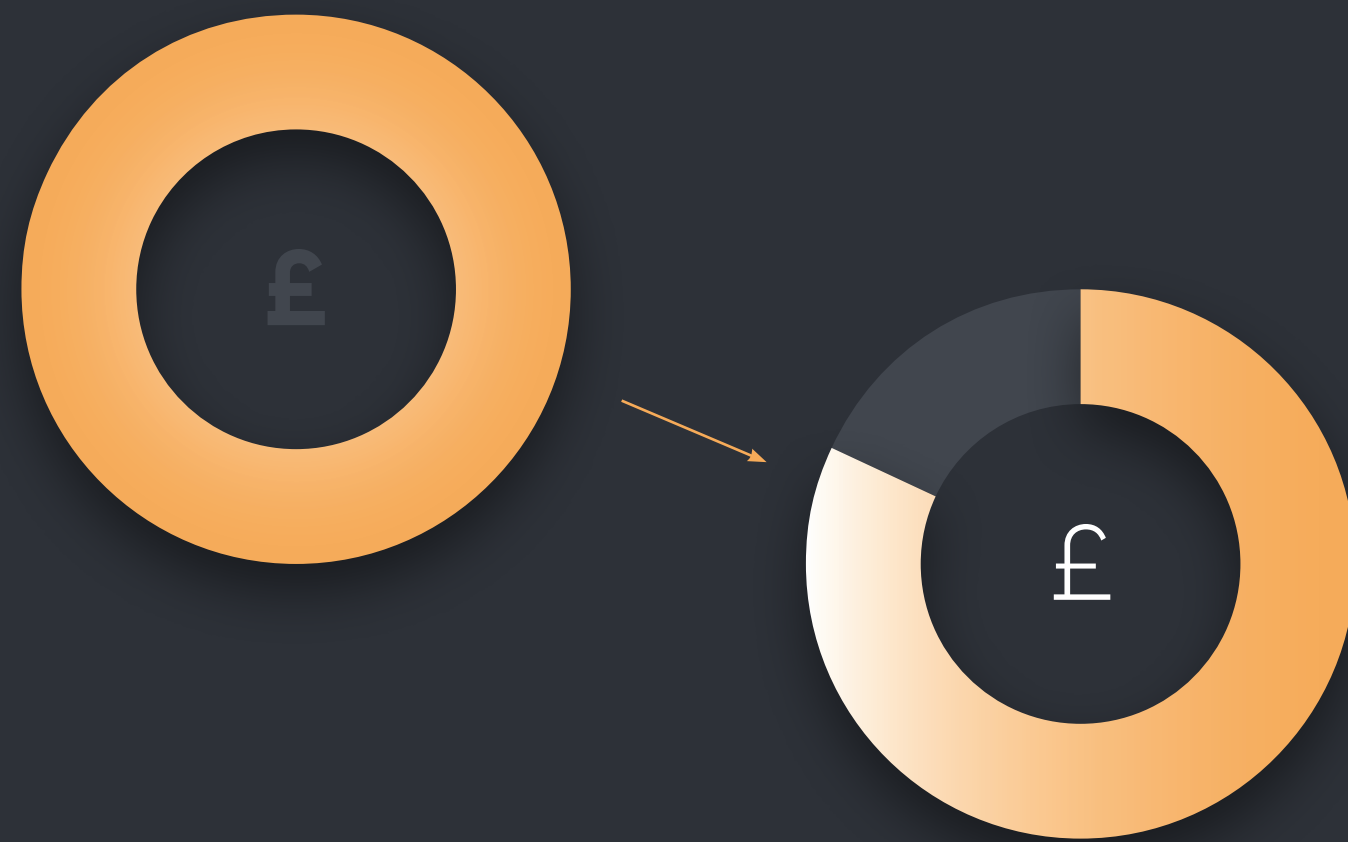
Reduce Cleaning Costs

PEGO generates significant efficiency gains that can lower overall cleaning costs in three ways.

> 200%

RETURN ON INVESTMENT FOR A PEGO INSTALLATION

(PEGO London City Case Study)



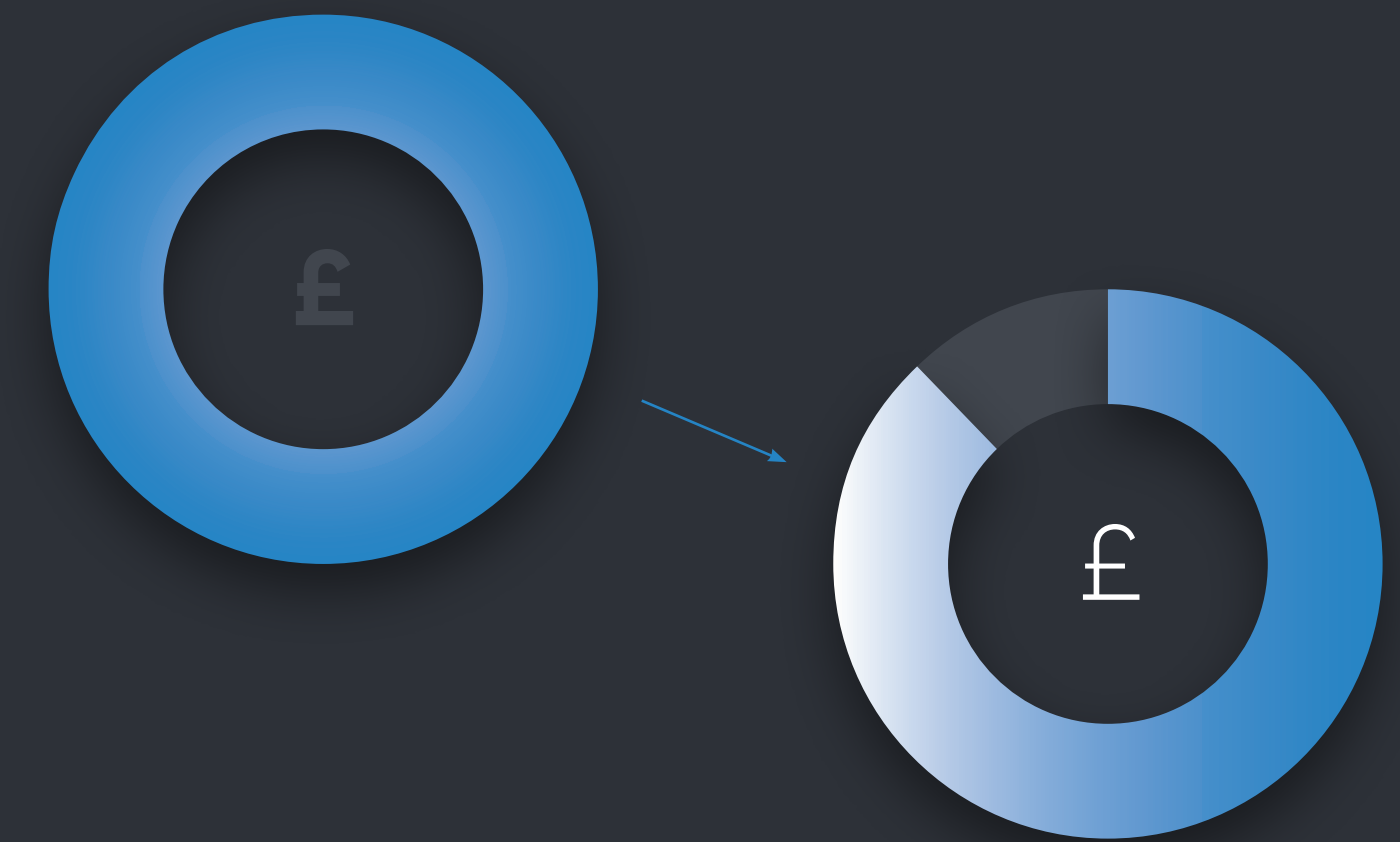
RESOURCE ALLOCATION

- Optimise hours of labour
- Reduce supervision requirements
- Adapt to specific workplace usage



CLEANING TEAMS

- Live optimal workflow
- Eliminate manual inspects
- Replace scheduled cleaning with targeted cleaning



OTHER

- Measurement of consumables
- Objective and measurable SLAs
- Engaged Users treat facilities better

Maximise Workplace Wellbeing

Cleanliness and hygiene are a key driver of workplace wellbeing. PEGO creates consistent workplace hygiene standards with full assurance data, creating a better work environment for all.

Workplace wellbeing is increasingly recognised as a key driver of staff productivity and long term retention.

> 70%

OF USERS SAY WORKPLACE HYGIENE WILL INFLUENCE HOW COMFORTABLE THEY ARE RETURNING TO THE OFFICE AFTER COVID-19.

PEGO Market Research

CONSISTENT WORKPLACE CLEANLINESS



POSITIVE BEHAVIOUR FEEDBACK LOOPS



QUALITY ASSURANCE AND HYGIENE AUDIT REPORTS



Reduce Environmental Impact

PEGO enables targeted cleaning operations when and where needed, eliminating numerous unnecessary cleaning operations, which saves water, reduces the utilisation of disposable wipes, gloves, paper, and chemical cleaning products.

The PEGO Pods can also be setup to control other environmentally friendly technologies, such as energy saving lighting and smart flushing.

9,300 litres

ANNUAL CONSUMPTION OF WATER PER
EMPLOYEE IN OFFICE BUILDINGS

MOST IS DISCARDED AS CHEMICALLY
CONTAMINATED WASTEWATER

(European Commission)

SOLID WASTE AND CLEANING CHEMICALS



WATER UTILISED IN CLEANING



ENERGY USED IN LIGHTING




Eliminates 100% of unnecessary cleans

Can control other environmental efficiency technologies

Positive Incentives

Cleaning Team

PEGO provides unprecedented tools for cleaning operatives to increase their effectiveness and demonstrate their professionalism; leading the way to a more effective workforce, and merit-based remuneration.




Cleaning Team

- AUTOMATED EFFICIENT WORKFLOW
- FULL TRACK-RECORD OF PERFORMANCE
- MERIT-BASED REMUNERATION

Workplace Users

Our User Features promote the sense of collective ownership of workplace hygiene, motivating Users to leave facilities cleaner and tidier after each utilisation.



Workplace Users

- MINDFULNESS OF HYGIENE
- MORE CONSIDERATE BEHAVIOUR

>700,000

CLEANING INDUSTRY EMPLOYEES IN THE UK

(The British Cleaning Council)

IMPLEMENTATION

Installation & Operation

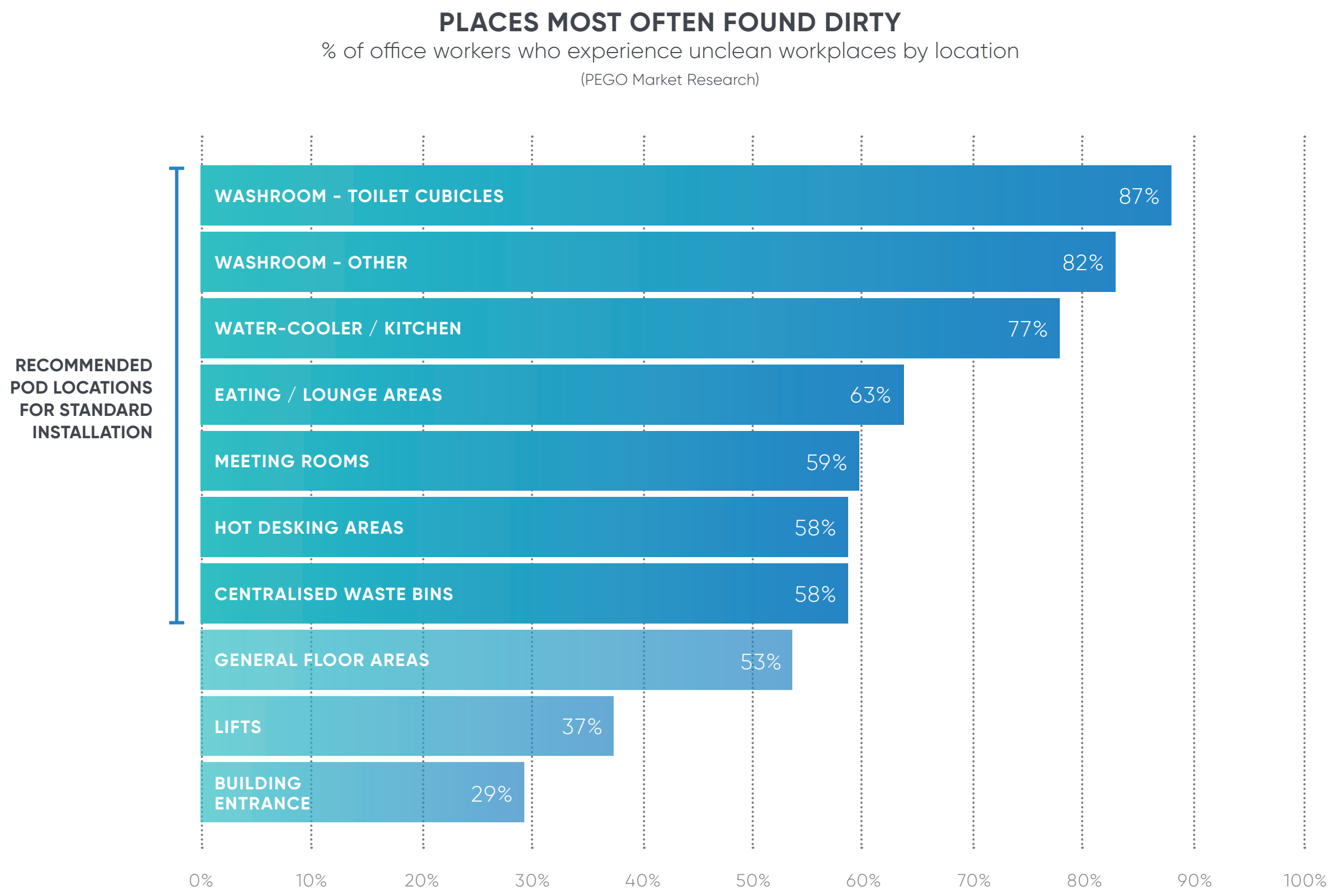
Where to Install

Whilst the PEGO Pods can be fitted to any area of the workplace, the System drives the highest cost/benefit in areas which require the most frequent monitoring and cleaning.

Our research suggests that generally these areas also have the greatest impact on the workplace wellbeing.

We survey each client building to provide a tailored proposal.

Based on our experience, we propose three installation options, with varying density of Pods. Generally speaking, higher density installations enable higher percentage efficiency gains.



	Low Density	Mid Density	High Density
Square Feet Per Pod	1,800	750	400
Square Meters Per Pod	167	70	37
Workplace Users Per Pod	9	3,75	2
Gross Efficiency Gains	~10%	~20%	~30%
Net Efficiency Gains	~7%	~14%	~18%

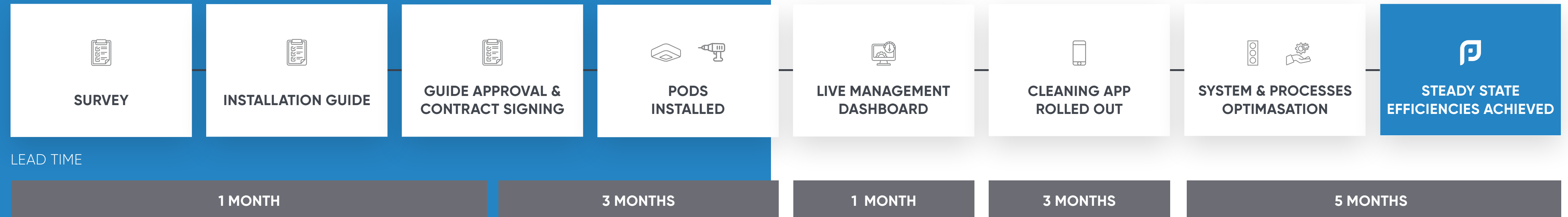
Timeline for Implementation

All installations start with a site survey by our team. We then issue the Installation Guide for the client's approval, detailing where and how the hardware will be installed.

The client fits the brackets for each device in line with the approved Installation Guide, and we come on site to mount and setup all the Pods.

After the initial period of calibration and baseline measurement, your Management Dashboard will go live.

The Cleaning Team's App and workplace User Features are normally deployed at a later stage.



Our technicians visit the facilities and discuss your requirements. We then provide a custom Installation Guide for your installation.

Pods are installed in the facilities, ceiling mounted, with one of our engineers on site to configure the system and provide customer support.

After the calibration period, we provide all designated Dashboard users access to the live Dashboard.

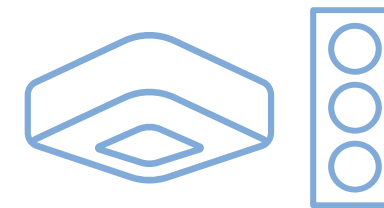
The cleaning team is provided access to the App and training.

Workplace user features are rolled out. These may include traffic lights over critical areas, mobile apps, or hygiene reports.

Pricing

To implement PEGO, there is an upfront purchase of the required hardware and an annual subscription fee for the software services and full client support.

Hardware Purchase



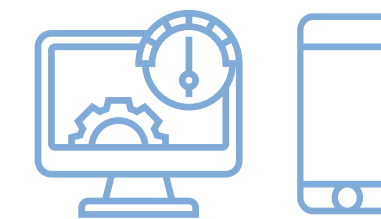
Upfront Hardware Costs

Includes:

- Initial survey and Installation Guide**
- On-site installation and calibration**
- 5 year warranty**

£240 / Pod¹

Service Subscription



Annual Service Fee

Includes:

- Unlimited Dashboard and App users**
- Dedicated client account manager**
- Training for Dashboard and App users**
- Remote technical support**
- On-site technical support if required**
- Operating the system 24/7**
- Regular software updates and improvements**

£6 / Pod per Month

¹Hardware base price, discounts available for larger installations.