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Hitachi Solutions Europe

G-Cloud 15 Service Definition Document

Cloud Sustainability & Green Coding

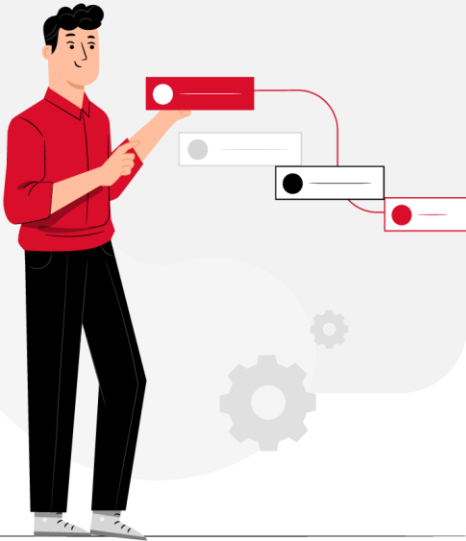
Cloud Sustainability & Green Coding

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What the service is, what you get, and the benefits

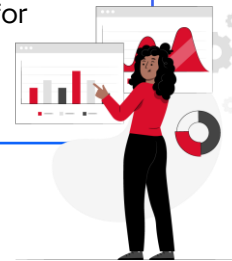
Service Description

Helps organisations reduce the environmental impact of cloud-based digital services through sustainable architecture, efficient software engineering and operational optimisation. It embeds sustainability into cloud design, development and live service operation while improving performance, resilience and value for money.



Service Features

- Assessment of cloud workloads to identify energy, carbon and efficiency impacts
- Baseline sustainability metrics and improvement roadmap development
- Sustainable cloud architecture design and optimisation
- Green coding reviews focused on performance and resource efficiency
- Guidance on sustainable software frameworks, runtimes and services
- Cloud resource right-sizing, scheduling and decommissioning
- Integration of sustainability into FinOps and cost management practices
- Support for cloud carbon measurement and reporting tools
- Sustainability-focused DevOps and delivery governance practices
- Knowledge transfer, standards and training for delivery teams



Service Benefits

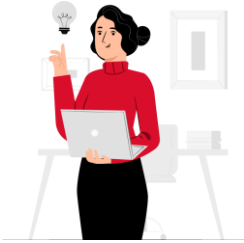
- Reduced environmental impact of cloud-hosted digital services
- Lower energy consumption and associated cloud carbon emissions
- Improved value for money through efficient resource usage
- Better performing and more resilient digital services
- Alignment with government sustainability and Net Zero objectives
- Improved transparency through measurable sustainability metrics
- Reduced long-term cloud operating costs
- Embedded sustainability within digital delivery practices
- Increased organisational capability in sustainable cloud delivery
- Long-term maintainability and scalability of digital services



Cloud Sustainability & Green Coding

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Reduce carbon, cost and waste across cloud and software



What this service is for

Turn sustainability intent into measurable engineering changes

Public sector teams are under pressure to cut emissions and spend but often lack a clear baseline and practical levers to pull. This service helps you understand cloud and application footprints, then prioritise the changes that reduce energy use, remove waste and improve utilisation.

We translate findings into actionable architecture, workload and engineering improvements, plus the controls and reporting needed for ESG and cloud emissions.

Key outcomes: Carbon and energy baseline | Prioritised optimisation roadmap | Emissions-aware architectures | ESG-ready reporting



Why this service is useful

Focus effort where it moves the metrics

Cloud sustainability can stall when teams cannot prove where emissions come from, or which changes will reduce them without harming performance. We provide a clear baseline across subscriptions and workloads, then apply a structured optimisation approach across architecture, workload configuration and software patterns.

This reduces waste and improves transparency, with dashboards and auditable reporting outputs that support internal governance and external scrutiny. It also helps align engineering teams on practical standards that stick beyond the engagement.

Common triggers: Rising cloud spend | No emissions baseline | Over-sized workloads | Inconsistent tagging | Net zero reporting pressure | Audit and assurance gaps



Why this service is different

Sustainable service by design

We combine technical optimisation with governance and reporting, so you can show what changed, why, and the impact. Our approach is decision-led and assurance-ready: clear baselines, prioritised trade-offs, and practical controls that teams can operate.

Rather than a one-off review, we embed a sustainable development approach, repeatable engineering practices, and monitoring so progress continues after handover. We follow good practice principles from The Green software foundation and Microsoft including SCI to deliver actionable recommendations.

Differentiators: Baseline to backlog | Controls, not just advice | Audit-friendly evidence | Engineering standards embedded | Microsoft Sustainability Manager enablement

How we will deliver

Discovery-led, iterative, and assurance-ready from day one

We deliver the assessment in structured phases with regular checkpoints, giving stakeholders early visibility of evidence and emerging findings. This mirrors government best practice: iterate, engage the right people, and maintain a transparent audit trail showing what was assessed and why recommendations were prioritised.

We begin by aligning on objectives, constraints, stakeholders and access, creating shared understanding from the outset. We then run focused discovery to understand your current position across workloads, architectures, controls, governance and operating model. Using recognised frameworks — including Green Software Foundation principles and Well-Architected review criteria — we assess findings and translate them into a prioritised roadmap designed for incremental delivery.

Throughout, we ensure documentation and recommendations remain “assurance-friendly”: each action is linked to specific risks, ownership and the practical steps required, avoiding generic statements and ensuring teams can confidently act on the outcomes.

Mobilise

Activities

We begin by establishing the conditions for a successful engagement. Mobilisation confirms objectives, scope, access requirements, and stakeholders, enabling shared understanding of outcomes and constraints.

We agree ways of working, evidence needs, and decision-making paths so the assessment proceeds smoothly and efficiently from day one.

Outputs

- Agreed scope, objectives, and engagement plan
- Stakeholder and access model confirmed



Discover

Activities

We build a clear picture of your current IAM landscape. We review identity stores, access models, user journeys, controls, and operational processes.

Workshops and artefact reviews help us understand how identities are issued, managed, governed, and removed, as well as the pain points teams experience today.

Outputs:

- Current-state IAM baseline and process mapping
- Identified risks, constraints, and areas of focus



Assess

Activities

Assess translates discovery insights into structured analysis against recognised good practice, including least-privilege principles, Zero Trust patterns, and cloud provider IAM models.

We evaluate configuration, governance, lifecycle management, and access patterns, producing clear, prioritised recommendations that balance security, usability, and delivery practicality.

Outputs

- Prioritised IAM assessment findings and recommendations
- IAM improvement roadmap with risk-linked actions



Embed

Activities

Embed focuses on enabling lasting capability within your organisation. We co-develop improved IAM patterns, access governance approaches, and bespoke implementation guidance.

We support teams to adopt new practices, produce clear documentation, and hand over ownership—while offering optional short-term support to ensure a smooth transition.

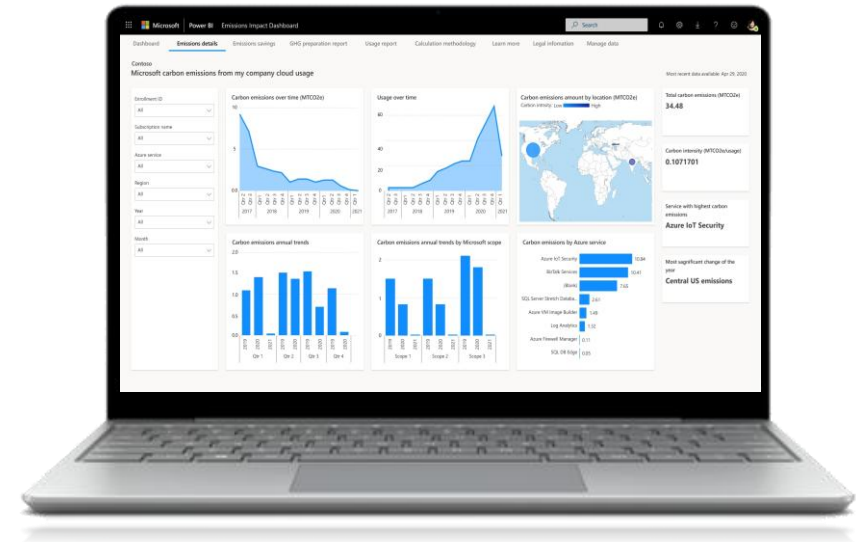
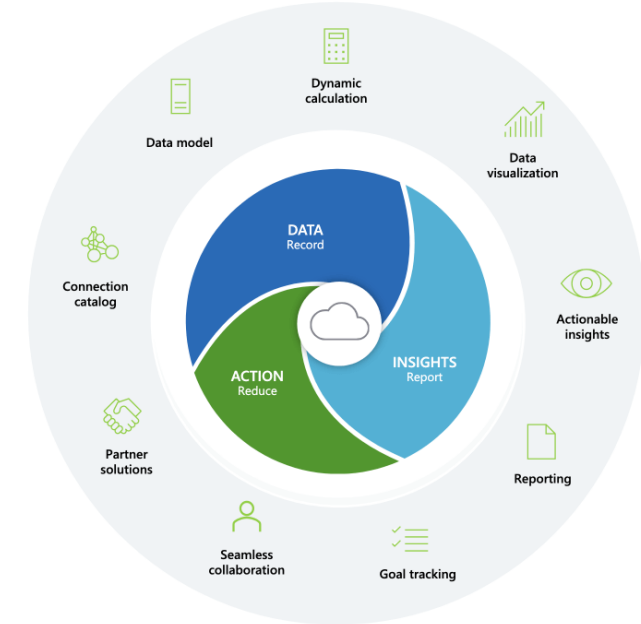
Outputs

- Standards, patterns and playbooks
- Implemented improvements and guardrails
- Handover for internal ownership

From cloud emissions data to measurable reduction

Our approach:

- 1) **Baseline:** Capture cloud emissions, energy and usage across subscriptions and workloads.
- 2) **Standardise:** Configure Sustainability data model, factors and calculations for consistent reporting.
- 3) **Govern:** Set targets, KPIs, ownership and audit evidence expectations.
- 4) **Report:** Publish dashboards and ESG outputs for emissions, cost, usage and efficiency.
- 5) **Optimise:** Use insights to right-size, schedule, autoscale, manage power-state, and refactor where needed.
- 6) **Improve:** Monitor continuously and keep a prioritised optimisation backlog.



The Hitachi logo is displayed in a bold, white, sans-serif font in the top right corner of the image. The background of the entire slide is a photograph of a grand, multi-story classical building with a curved facade, many windows, and a balcony with a Union Jack flag. The image has a dark, semi-transparent overlay to make the white text stand out.

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Hitachi Solutions Europe

UK Government Overview

Hitachi Solutions for the UK Government

HITACHI

Our **vision** is to be government's partner of choice for the design and delivery of **sustainable, human-centred, Microsoft Solutions and digital services**.

Human-centred Services

Every service starts with people and how technology can make their day simpler.

+

Deep Microsoft Expertise

Hitachi Solutions is dedicated exclusively to the Microsoft ecosystem.

+

Emotionally Aware Delivery

Our former civil servants bring deep understanding and cultural alignment.

=

+

One Hitachi

Hitachi Solutions is part of Hitachi, Ltd., one of the world's largest and most respected organisations.

Sustainable government transformation.

Human-centric by default.

Powered by Microsoft.



Our Credentials

HITACHI

Microsoft



Microsoft global Government and Finance
Partner of the Year 2025

Microsoft Partner of the Year 2025 Finalists in
Build and Modernise AI Apps, Dynamics 365
Supply Chain, Dynamics 365 Sales and Customer
Insights, and Low Code Application Development

22 Years in **Microsoft's Inner Circle**
(including 2025)

Microsoft Solutions Partner across AI Business
Solutions, Cloud and AI Platforms and Security
with **18+ specialisations**

Industry



Keystone member of the **Government Digital
Sustainability Alliance**

Crown Commercial Service Supplier

Cyber Essentials Plus Certified

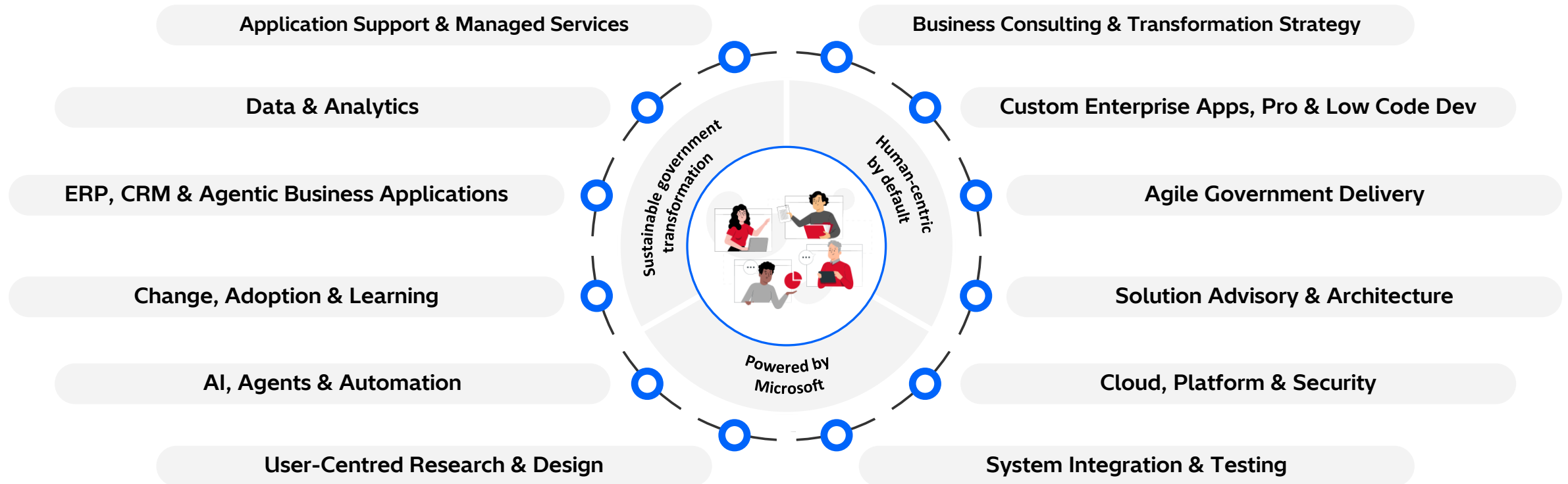
ISO-certified across Quality, Environment, Service,
Business Continuity, Information Security, and
Privacy Management

Recognised in the **Smarter Working Live Awards**
for our regulatory services Customer Experience
work with the Environment Agency

Our Services and Expertise

HITACHI

Sustainable business transformation through tailored advisory, consulting, and technology solutions.



Our Clients

HITACHI



"Hitachi Solutions brings substantial digital expertise to the table, complementing our robust business experience. Their insights have been instrumental in identifying opportunities for enhancement and accelerating our initiatives."

Gillian Pratt

Deputy Director Future Regulation
at Environment Agency



"Hitachi Solutions brought in a great project team who we kept for the full duration; they engaged with The Royal Mint side of things very effectively. It really felt like they were part of our own team."

Richard Hobbs

CIO The Royal Mint



"Hitachi Solutions bring the innovation, space and expertise needed to deliver digital transformation at a pace that is needed."

Andy MacDonald

Director of Customer Services,
Aberdeen City Council



"Hitachi Solutions were really good to work with, expertly turning our processes into slick system functionality. Their patience, understanding and "one team" approach to this project facilitated a free-flowing, inclusive environment. Hitachi Solutions' expert technical teams have delivered a great user experience, employing creative thinking to deliver to our often complex requirements."

Daniel Saward

OIA Head of Digital Technology



"DHSC collaborates closely with Hitachi Solutions LTS, emphasising the significance of our enduring partnership characterised by collaborative teamwork and mutual trust. Operating with a framework of high trust and capability, Hitachi Solutions ensures the delivery of quality and excellence to DHSC. Hitachi Solutions should be very proud of their track record in DHSC."

Bryan Rayner

Head of IT Business Systems



"Right from the start, we recognised in Hitachi Solutions a potential partner that would listen to us and really recognise the value of what we were trying to achieve, the lifesaving benefits of what we were trying to build and support."

Alex Duncan

Chief Technology Officer



Centre for Environment
Fisheries & Aquaculture
Science



Department
for Environment
Food & Rural Affairs



Valuation Office
Agency



HM Revenue
& Customs



Rural Payments
Agency



City of Westminster



Homes
England



THE ROYAL BOROUGH OF
KENSINGTON
AND CHELSEA



UK Export
Finance



Forestry and
Land Scotland
Coilltearachd agus
Fearann Alba

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