

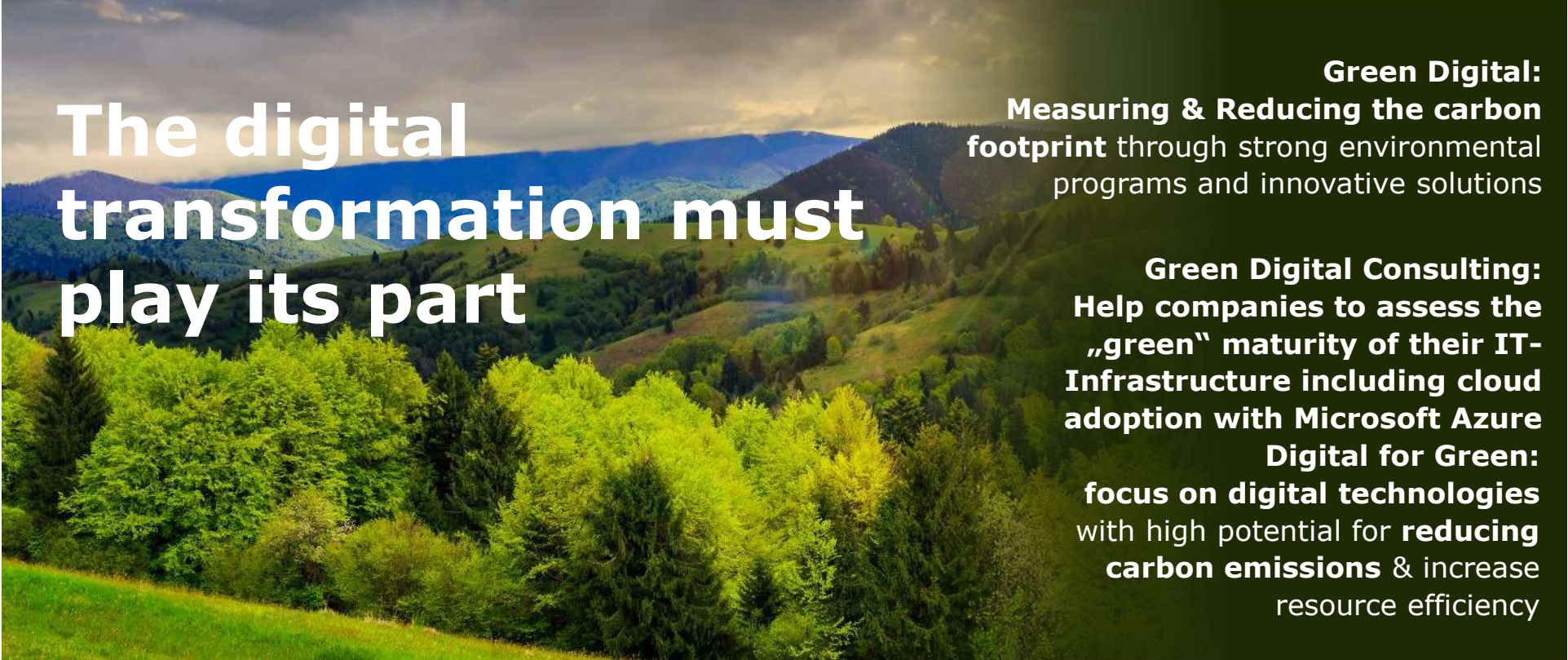


Digital Decarbonization Assessment a maturity perspective

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The greatest threat is climate change



The digital transformation must play its part

Green Digital:
Measuring & Reducing the carbon footprint through strong environmental programs and innovative solutions

Green Digital Consulting:
Help companies to assess the „green“ maturity of their IT-Infrastructure including cloud adoption with Microsoft Azure

Digital for Green:
focus on digital technologies with high potential for reducing carbon emissions & increase resource efficiency

We know about the impact ...

- ▶ Every day, we are seeing the **concrete effects of climate change**
- ▶ A growing **environmental movement has taken to the streets**, demanding that politicians and organizations act now to reduce CO₂ emissions
- ▶ Digital represents 10% of the world's electricity
- ▶ **Digital technologies are responsible for 4% of global greenhouse gas emissions** ¹⁾
- ▶ **Companies must take their responsibilities** towards the impact of digital solutions and infrastructure



1) including video streaming

Atos environmental program external ratings



The **CAC 40** is a stock market index of the 40 largest French market capitalizations listed on the Paris stock exchange. CAC means "Continuous Assisted Quotation".

Sustainable in the digital era

why and what?



CO2

Context In today's landscape of emerging global trends, clients and stakeholders explicitly demand that digital businesses they engage with are operating actions to tackle climate change. Reducing CO2 emissions is playing a central role in delivering their digital agenda.

Strength Atos understands the importance of energy consumption in digital services and knows what it means to sustainably transform operations. We've been there, seen the bigger low-carbon picture, and can enhance sustainability practices of digital organizations.

Offer We will apply our approach to get insights into your digital decarbonization ambition and the to-be state to pursue. Applying tools, the maturity level of the related practice is assessed. The output is used to develop a roadmap how to move from the current maturity level to the desired digital decarbonization maturity state.

Main steps towards digital decarbonization

Awareness

Becoming aware that decarbonization plays into client's strategies with a risk-based view

**Ambition
Workshop**

Measure

Evaluate digital related categories and apply tooling to measure their CO2 emission

**Questionnaire and
carbon calculator**

Actionize

Define maturity level, benchmark it and start implementing controls to the reduce CO2

Roadmap

Digital Decarbonization Assessment

main components



Ambition Workshop

objectives and process

Objectives

- ✓ Understanding your current views of the Digital Decarbonization practice in use.
- ✓ Gaining insight into your ambition and corresponding maturity level that fits best into the IT-side of your CSR strategy.
- ✓ Identifying possible, short-term actions to help achieving your ambition.

Preparation

All workshop participants will be asked to complete the **self-assessment**, consisting of 27 questions: 2 generic and 25 specific ones.

Recommended workshop participants

- CIO
- Head of CSR
- IT Sustainability Manager
- Head of Infrastructure & Network
- Head of Workplace Services
- Head of IT Procurement

Outcome

- A **report** consisting of:
- Analysis of self-assessment
 - Reflection and wrap-up on the discussion around your digital decarbonization ambition
 - Wrap-up of identified short-term actions

Assessment Questionnaire



More details on the core of the Digital Decarbonization Assessment

Structure over 120 questions with 6 levels of maturity (0-5), distributed over 9 categories

Categories Data, Services Staff, Software & IT Solutions, Hardware, Infra/Network, Data Center, Company, Supply Chain, Usage Management

Sources

- Task force on climate-related financial disclosure (TCFD) implementation guide 2019
- UK HM greening government ICT strategy – combined assessment model 2015
- Best practice guidelines for the EU Code of Conduct on data center energy efficiency 2020
- COBIT 2019 framework
- Best practices and CSR (related) articles

Answers Validation



**Provided answers
are validated using a
combination of activities**

Questionnaire answers

- ▶ Inspection
- ▶ Inquiries
- ▶ Observation

Study documentation received

Interview and keep interaction with the interviewees

Review and monitor controls in use

Maturity Evaluation



A mechanism applied to the questionnaire determines the maturity level

5 → Optimizing The enterprise is focused on continuous improvement

4 → Quantitative The enterprise is data driven, with quantitative performance improvement

3 → Defined Enterprise wide standards provide guidance across the enterprise

2 → Managed Planning and performance measurement take place, although not yet in a standardized way

1 → Initial Work is completed, but the full goal and intent of the focus areas are not yet achieved

0 → Incomplete Work may or may not be completed towards achieving the purpose of objectives in the focus areas

Maturity Evaluation

way of working

Category	Weighting
Data	15%
Services Staff	5%
Software & IT Solutions	15%
Hardware	15%
Infra/Network	10%
Data Center	15%
Company	10%
Supply Chain	10%
Usage Management	5%



Level 0: CO₂ Unaware

Level 1: CO₂ Aware

Level 2: CO₂ Administrator

Level 3: CO₂ Insightful

Level 4: CO₂ Impactful

Level 5: CO₂ Reducer

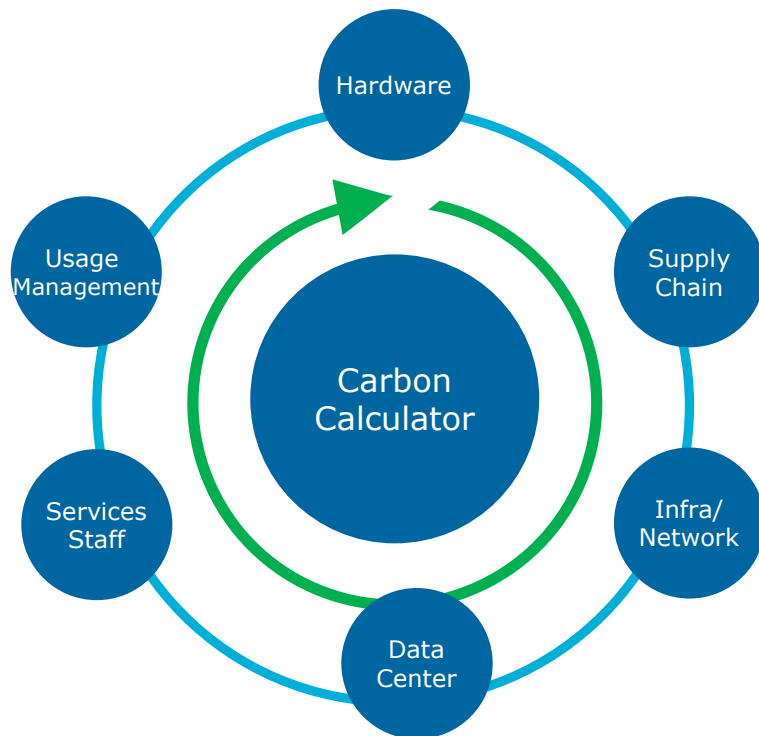
Maturity Evaluation

titles



Emission calculation

manufacturing and consumption



Hardware

- ▶ Servers
- ▶ Disks
- ▶ PCs
- ▶ Keyboards
- ▶ Mice
- ▶ Monitors
- ▶ Mobile phones
- ▶ Printers

Supply Chain

- ▶ Cloud
- ▶ Printing Services
- ▶ Mobile Device Management

Infra/Network

- ▶ Routers
- ▶ Switches
- ▶ Firewalls
- ▶ Storage
- ▶ Load Balancers
- ▶ Cables
- ▶ Network Security Devices

Data Center

- ▶ Facility
 - ▶ Power/Cooling
 - ▶ Disaster Recovery
 - ▶ Server Racks
- ▶ Hosting
 - ▶ Servers
 - ▶ Networks

Services Staff

- ▶ Buildings
- ▶ Professional Travel

Usage Management

- ▶ Employee Footprint
- ▶ Development / Testing Environments

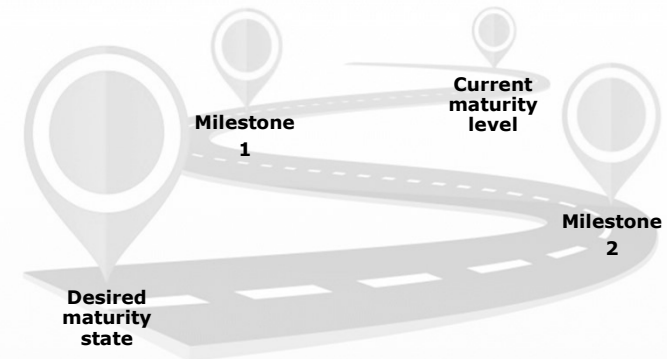
Roadmap Maturity Improvement



How to get to the desired maturity state?

The **roadmap** illustrates what needs to be done to get from the current maturity level to the desired maturity state

It is a **structured report** that gradually presents actions and defines **how to measure** their progress, using the **nine categories**



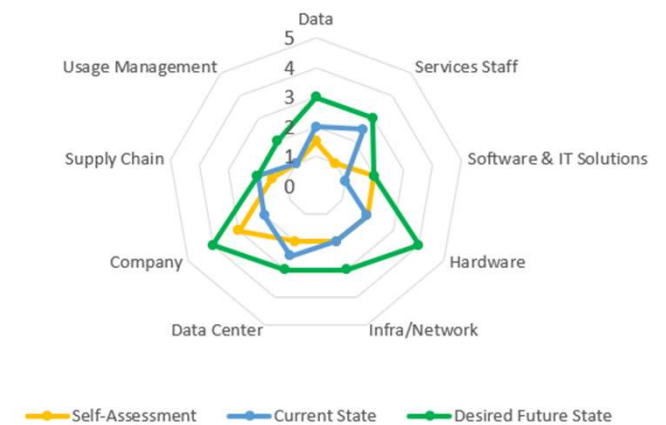
Consolidated Report

A written report documenting the results of the Digital Decarbonization Assessment



The **outcomes** of every activity of the **Digital Decarbonization Assessment** are documented in one single report.

Where possible, **illustrations are included** to increase the readability of this deliverable.



Consolidated report

more details

Additionally the consolidated report contains the following parts

1

A description of the entire process followed to conduct the Digital Decarbonization Assessment

2

The outcome of the ambition workshop including the desired future state

3

The current maturity level that is verified and justified

4

A roadmap that demonstrates how to move from the current situation to the desired state

5

An overview of documents studied and persons interviewed

Pricing and duration

per deliverable and in total

Ambition Workshop

Price: € 10K
Duration: 2 weeks

Roadmap Maturity Improvement

Price: € 10K
Duration: 1 week

Maturity Evaluation

Price: € 20K
Duration: 4 weeks

Consolidated Report

Price: € 5K
Duration: 1 week

Commercial Offer

in total

Price: € 45K*
Duration: 8 weeks

**Excluding VAT and expenses*

Decarbonization for Digital Cloud Platforms

Key features of Cloud Decarbonization with Microsoft Azure



Assist with creating **trusted cloud strategies** that achieve end to end CO2e reduction – across all environmental factors and GHG Protocol scopes



Complete **visibility and control** of emissions data throughout the entire cloud lifecycle



Embark on **complex cloud transformations** and reach business goals whilst meeting sustainability ambitions



Thank you

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The Atos logo is displayed in a white, bold, sans-serif font. The letters 'A', 't', and 'o' are lowercase, while 'S' is uppercase. The 't' and 'o' are connected, and the 'S' has a distinctive shape with a curved bottom.