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an EPFL research center

Why is it time for a green IT revolution for our cities?”.

IT Infrastructure & Circular Economy

THE 2030 AGENDA CANNOT BE ACHIEVED

WHITHOUT LOCAL ACTION IN CITIES

FUSTIC

FUTURE SUSTAINABLE TERRITORIES, INFRASTRUCTURES AND CITIES

Dr. Frédéric Dreyer
EPFL - ENAC

WELCOME TO FUSTIC

FUSTIC for « FUture Sustainable Territories, Infrastructure and Cities » aims to raise awareness and to support, educate, promote and reward research and innovation, in the areas of infrastructures, cities and territories. The goal is to have scientific, technological, educational and ethical impacts on the economy and the society both at national and international levels. Focus is set on the creation of solutions and projects linked to sustainable development and climate, in order to support the Swiss economy and territories in their challenges and good practices.

OUR CONCEPT

Fustic Association is process-oriented and works with cross-organizations to support digital technology and innovative best practices/products/services that will solve key economic, industrial, urban development and climate challenges for a sustainable future.

OUR MISSION

We want to unlock the full potential of digital solutions, inspire a culture of innovation and transformation, and bring viable solutions to our ecosystem & global markets, sciences and innovation at the service of Society.

Inspiring innovation and excellence are at the heart of everything FUSTIC Association does.

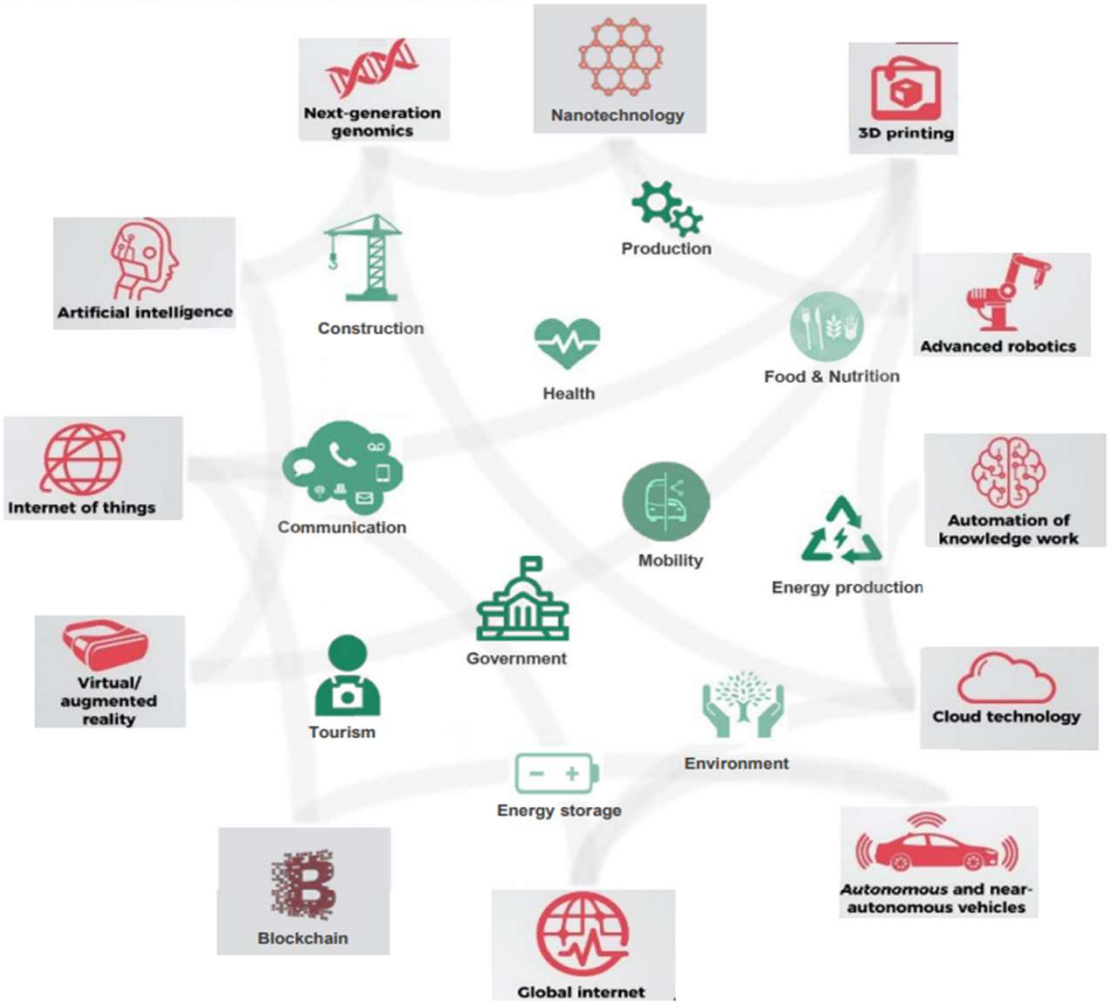
This embraces horizon scanning for emerging technologies and trends, leveraging cross-sector technology, and harnessing panels for expert advice and capability.

HOW TO UNLOCK THE POTENTIAL?

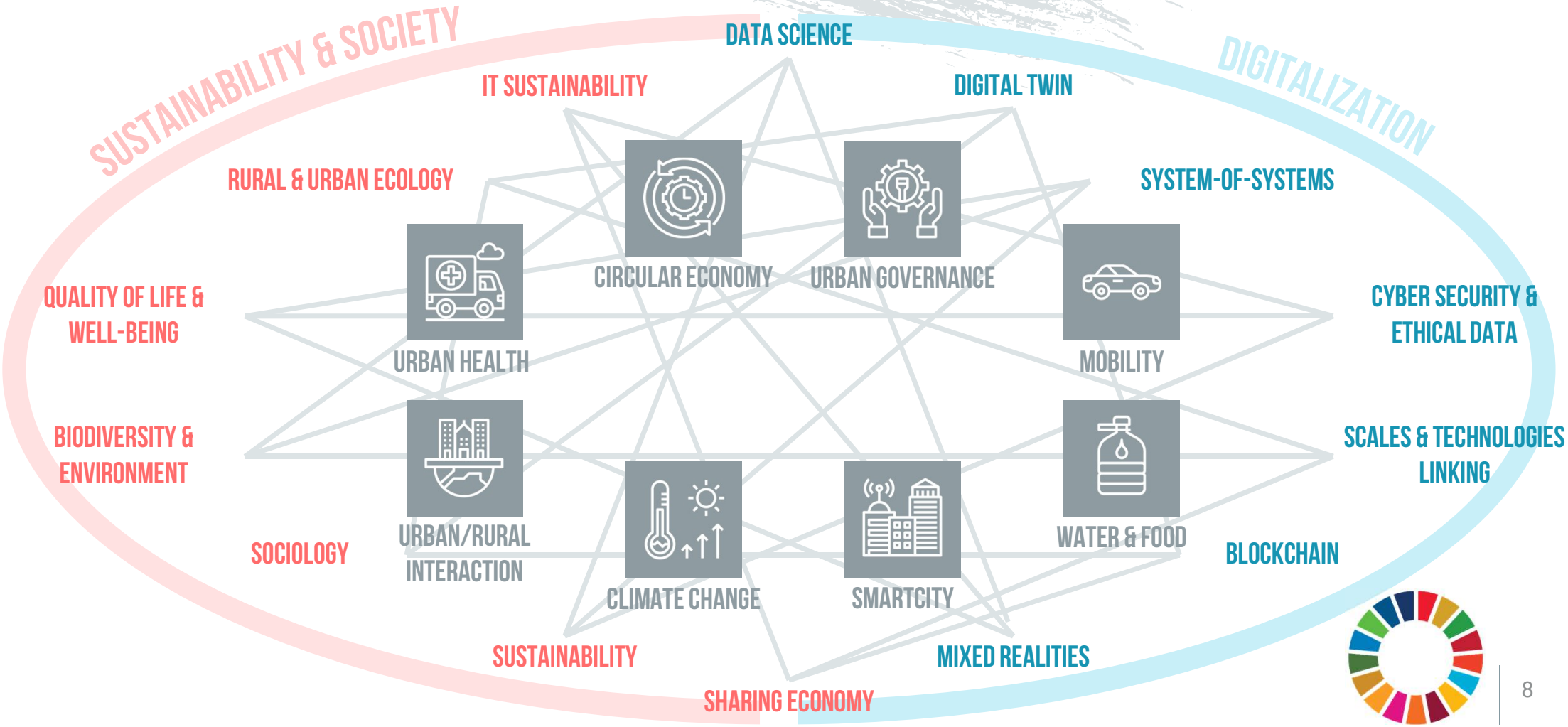
INGREDIENTS OF SCIENCE-BASED INNOVATION:

- Technologies / Knowledge
- Application fields / Needs
- Business models

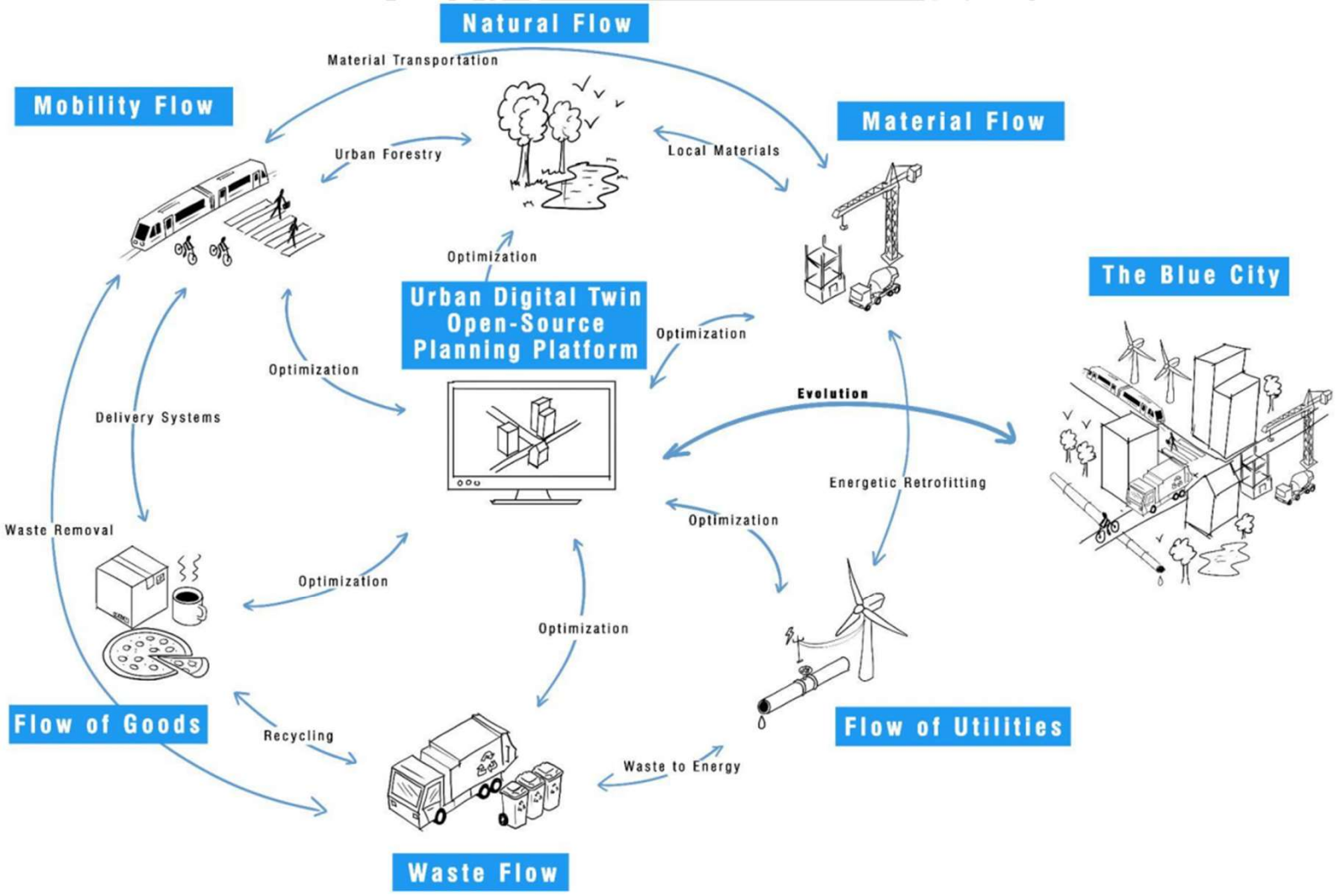
By boosting cooperation in heterogeneous & interdisciplinary innovation teams.



OUR 3 AXIS APPROACH AROUND SDGS

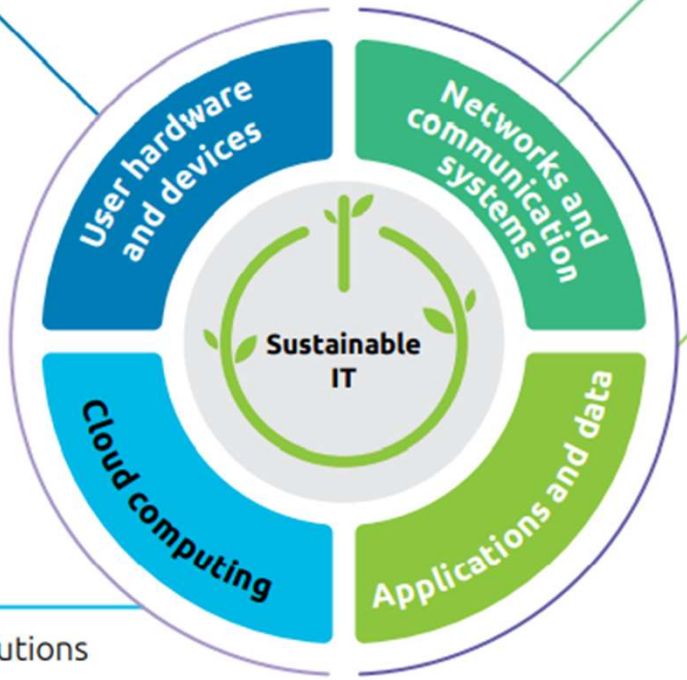


THE BLUE CITY PROJECT



SUSTAINABLE IT VERSUS IT 4 SUSTAINABILITY

1. Procuring hardware and user devices with minimum lifecycle carbon cost
2. Improving employee awareness of device utilization and sustainability
3. Proper disposal, recycling and refurbishment of hardware
4. Utilizing energy certified and auto-off hardware
5. Prolong the lifespan of devices



1. Deploy edge computing to reduce network transfers
2. Use efficient data transfer mechanisms

1. Adopt enterprise cloud solutions
2. Switch to a green cloud architecture and framework
3. Use AI/ML to optimize data center utilization and improve cooling solutions
4. Utilize or shift to public cloud utilizing low carbon grids

1. Ecodesign applications to minimize resource utilization
2. Develop sustainable architectures to rationalize applications, and identify and decouple energy-intensive applications
3. Streamline data architecture and optimize the data lifecycle
4. Design efficient and sustainable AI applications

GET IN TOUCH WITH US!

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6 speakers all along the Value Chain

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Holger Frauenrath

Associate Professor at LMOM
EPFL

Nicola Farronato

Head of Innovation
Torino City Lab

Marc-Elian Bégin

CEO of SixSQ

Patrick Montier

Manager of Smart City
Geneva State

Maxim Interbrick

Co-Founder
&
COO of Sparrow Analytics SA

Alessandra Rojas

Head of Tech4Impact (EPFL)

Panel - Q&A Session

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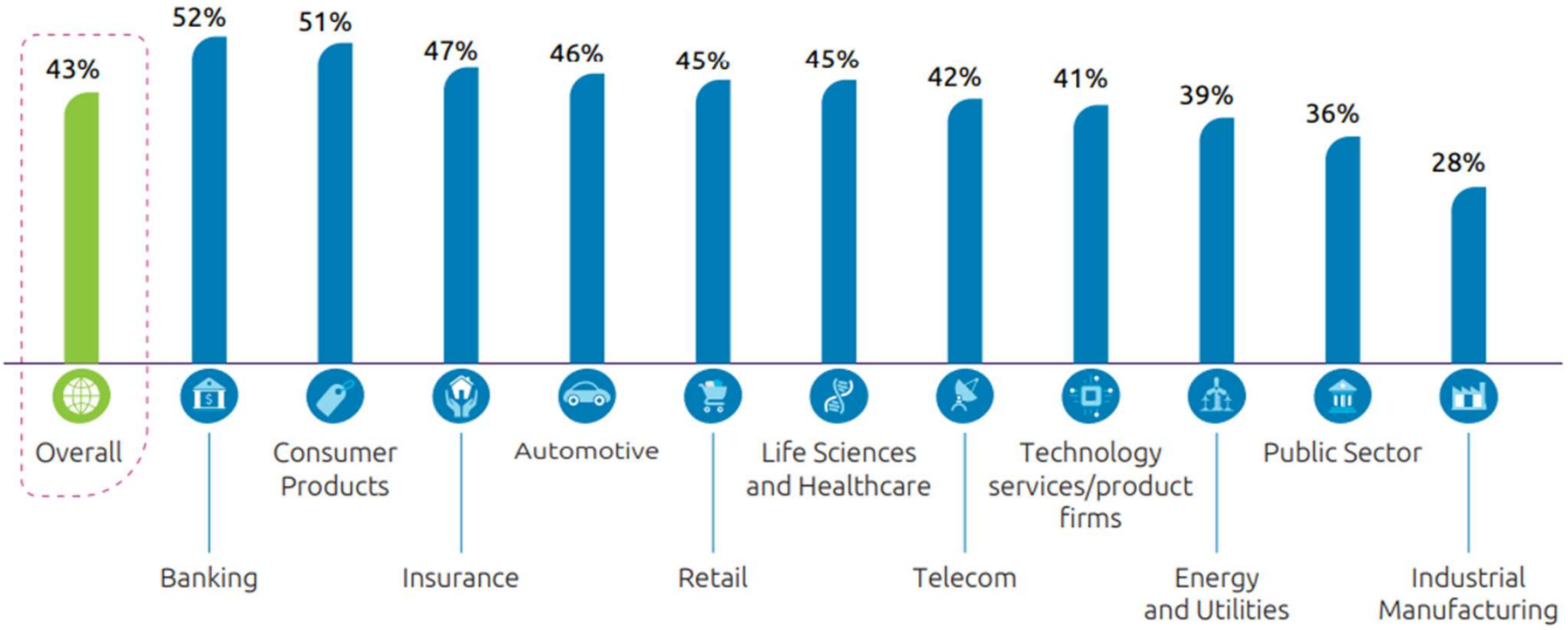
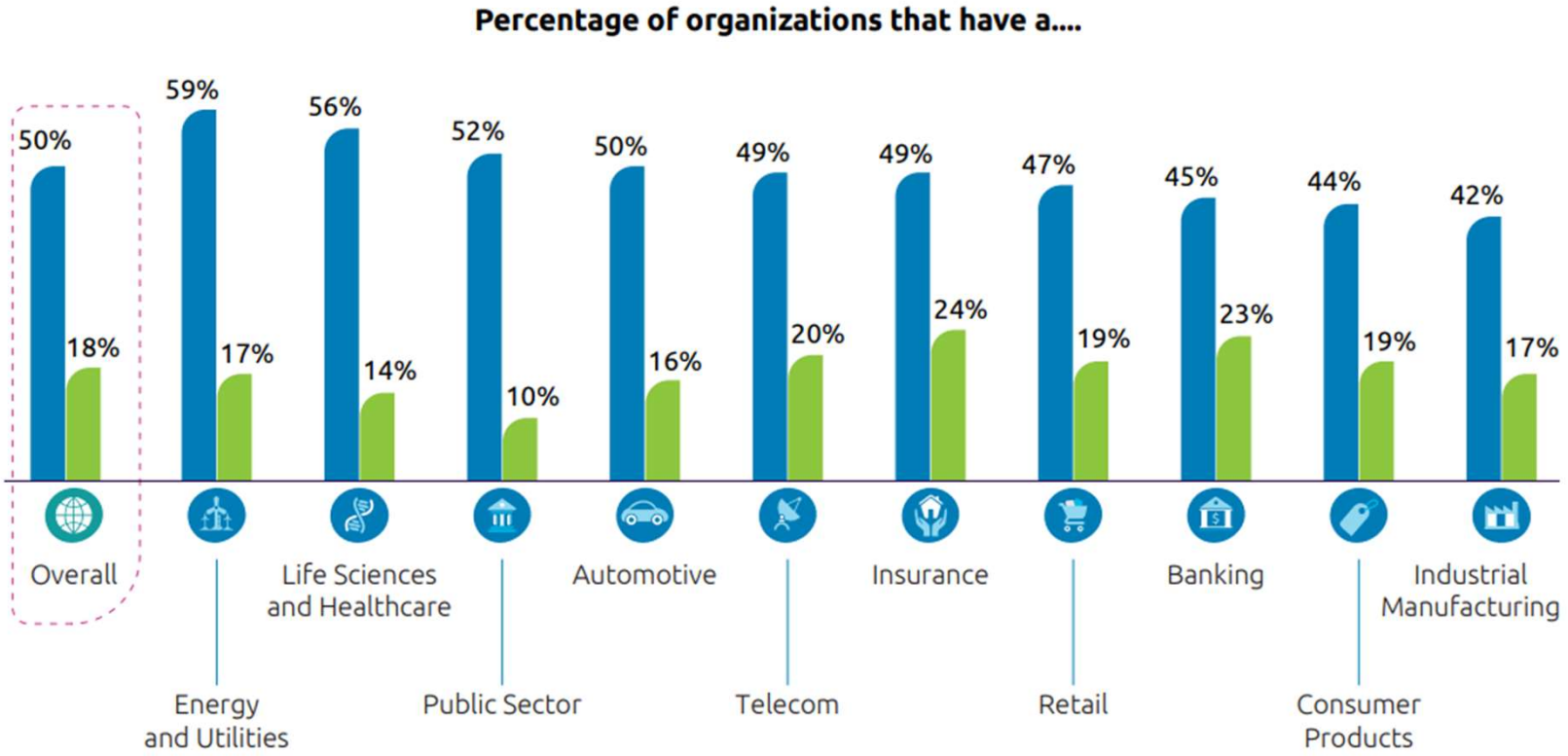
Percentage of respondents who are aware of the environmental impact of their organization's IT footprint



Source: Capgemini Research Institute, Green IT survey, December 2020 – January 2021, N = 1000 organizations.



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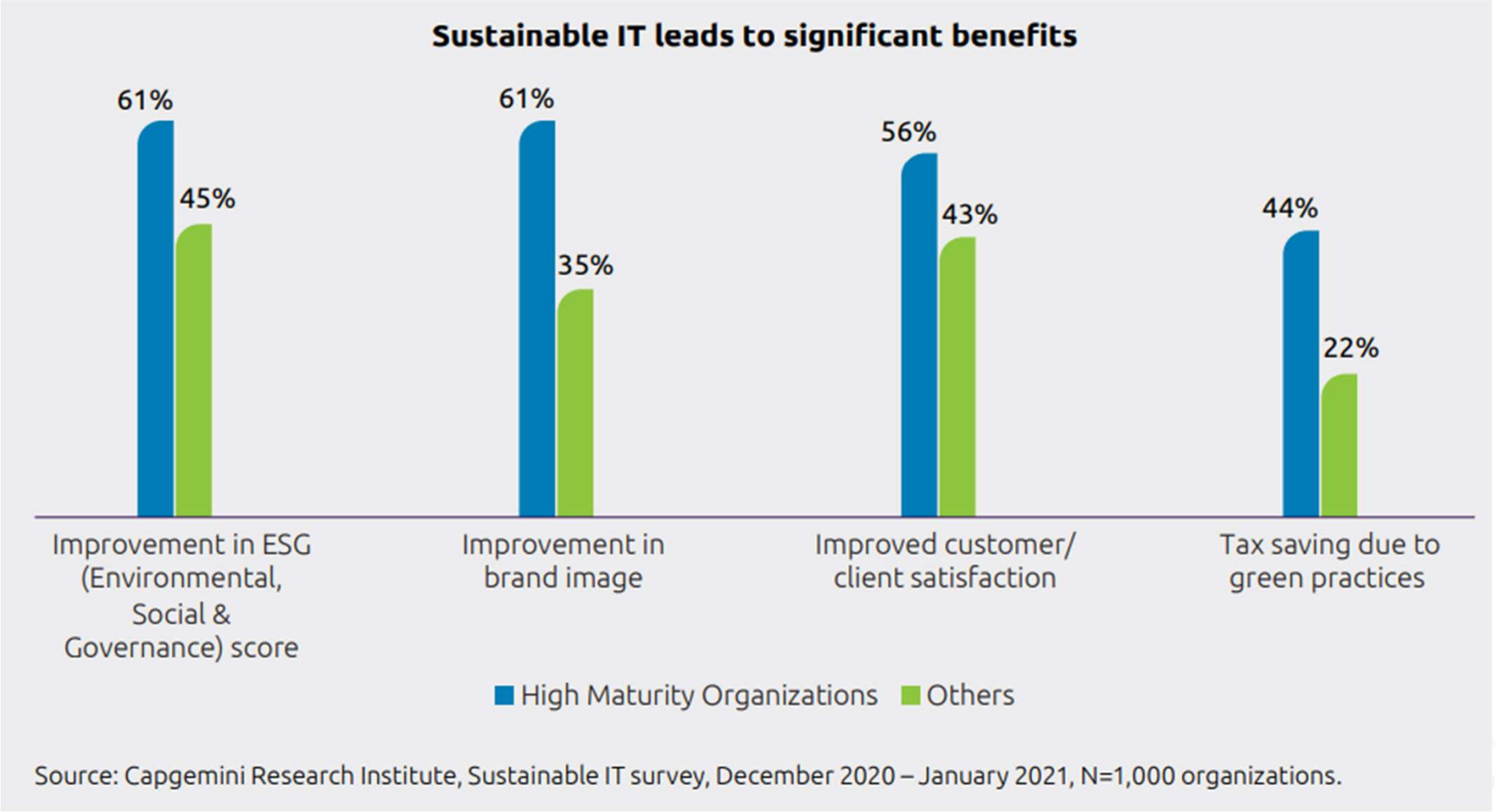
Sustainable IT leads to significant benefits
61%
45%
61%
35%
56%
43%
44%
22%
Improvement in ESG (Environmental, Social & Governance) score
Improvement in brand image
Improved customer/ client satisfaction
Tax saving due to green practices
High Maturity Organizations
Others
Source: Capgemini Research Institute, Sustainable IT survey, December 2020 – January 2021, N=1,000 organizations.