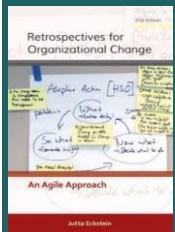
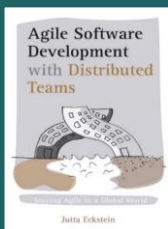
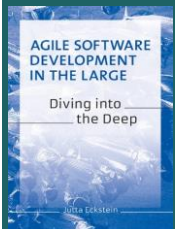


# Agile Sustainability

Jutta Eckstein

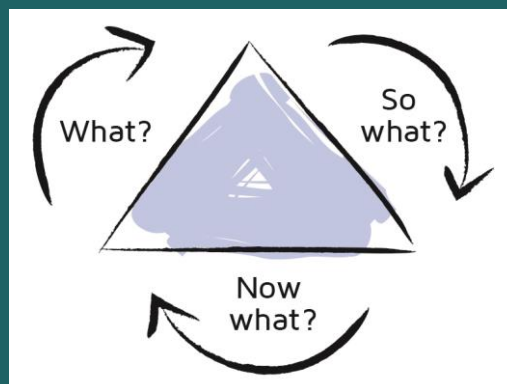
Pollution Control Commissioner on Ecological Environmentalism



## Agenda

**What?** Facts

So what? Insights



Now what? This is what you can do!

## Electricity footprint (TWh) of Communication Technology 2020-2030

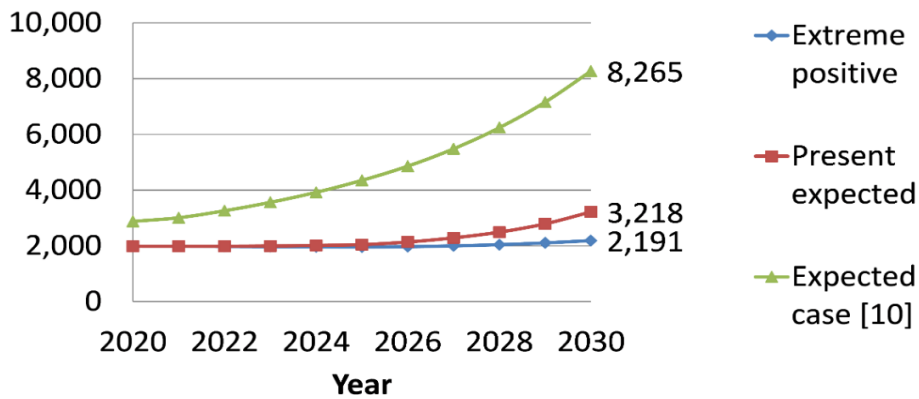


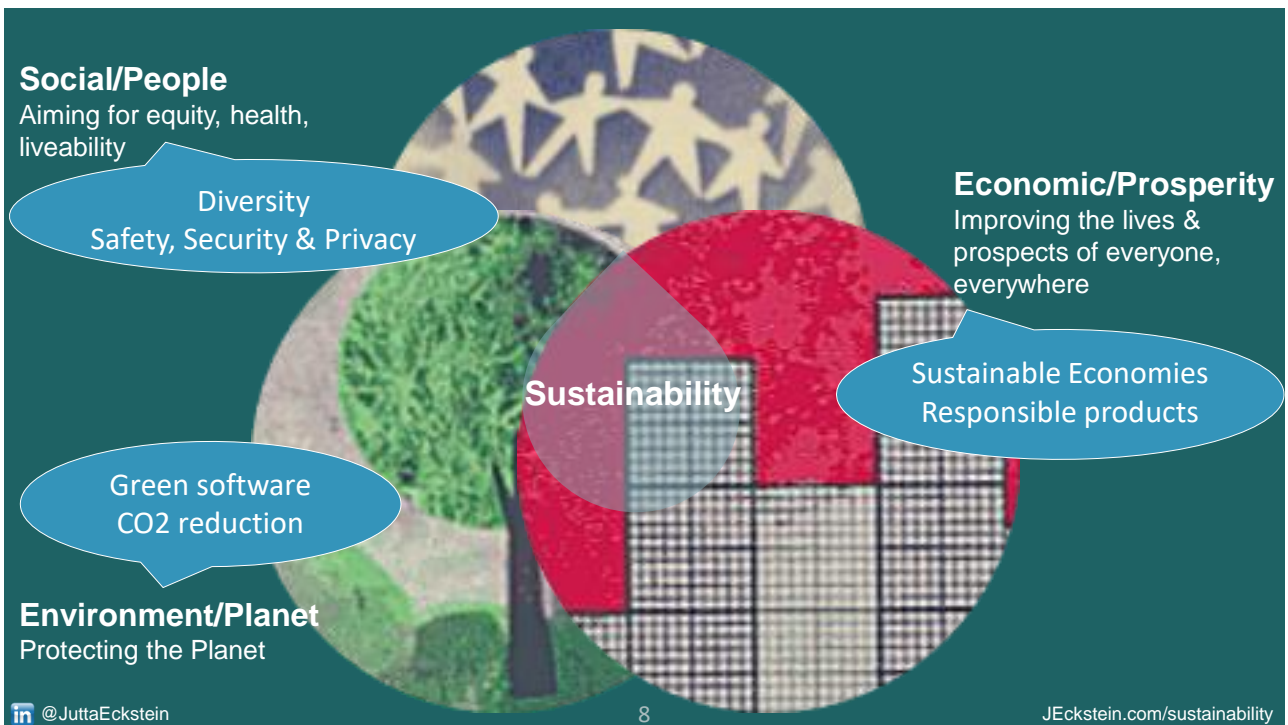
Figure 7. Trends for ICT electric power use 2020 to 2030.

© Anders Andrae: <https://bit.ly/47UIMMr>  
New perspectives on internet electricity use in 2030

Sustainable development  
is development that meets  
the needs of the present  
without compromising  
the ability of future  
generations  
to meet their own  
needs

UN Brundtland commission





**Social/People**


Patient's first name

Patient's last name  
  
Enter a valid last name.


**Economic/Prosperity**

After protest, open source software company Chef will let ICE contract expire

**Environment/Planet**

 In 2019, **53.6** million metric tonnes of electronic waste was generated worldwide (that's plus 21% in 5 years.)  
This is an equivalent of almost **5,400** Eiffel towers.

**Sustainability**

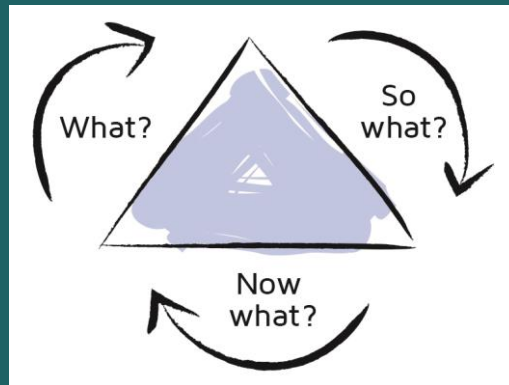
  
**CHEF**

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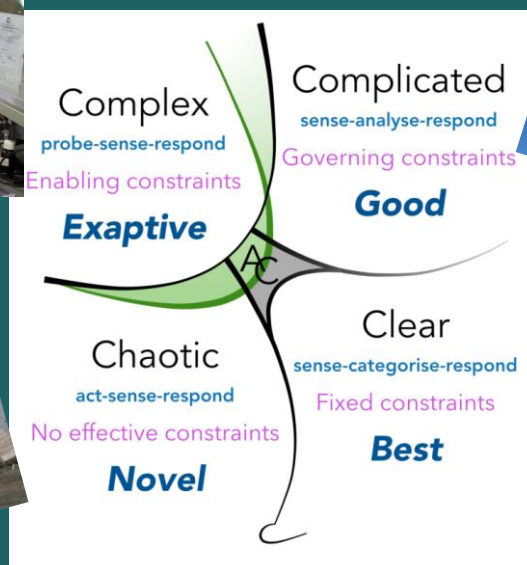
# Agenda

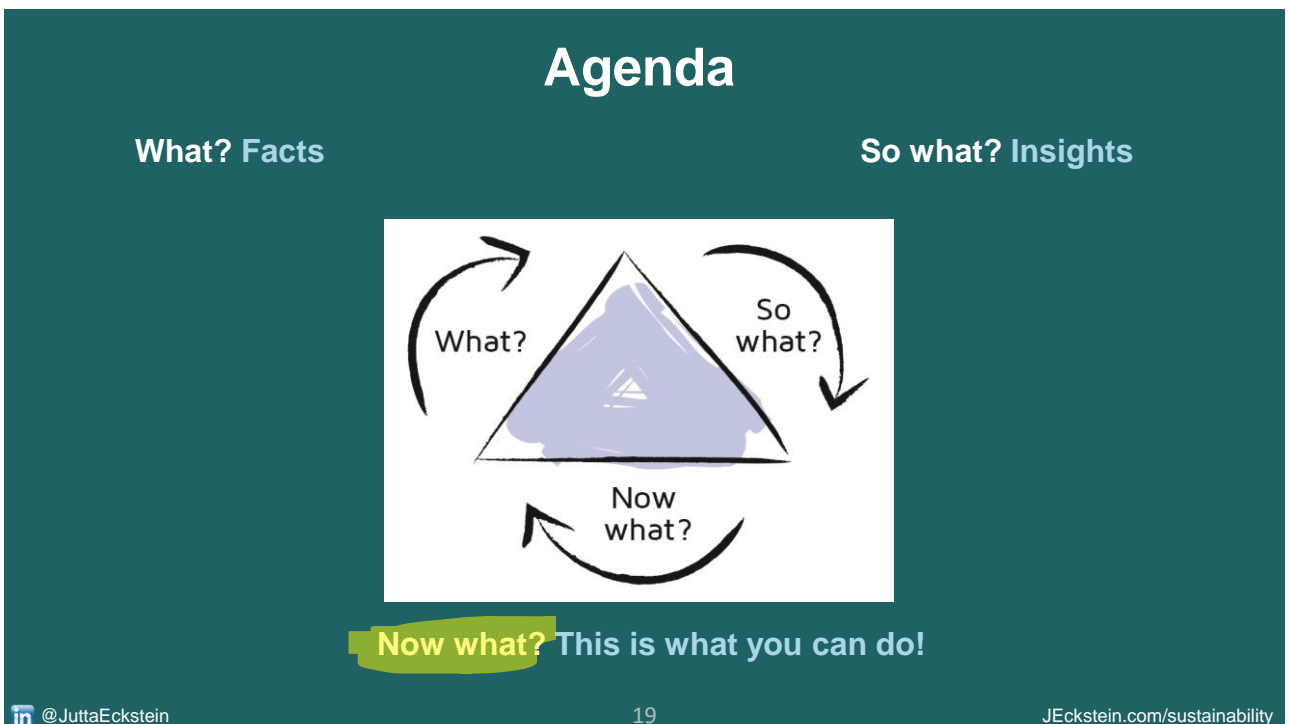
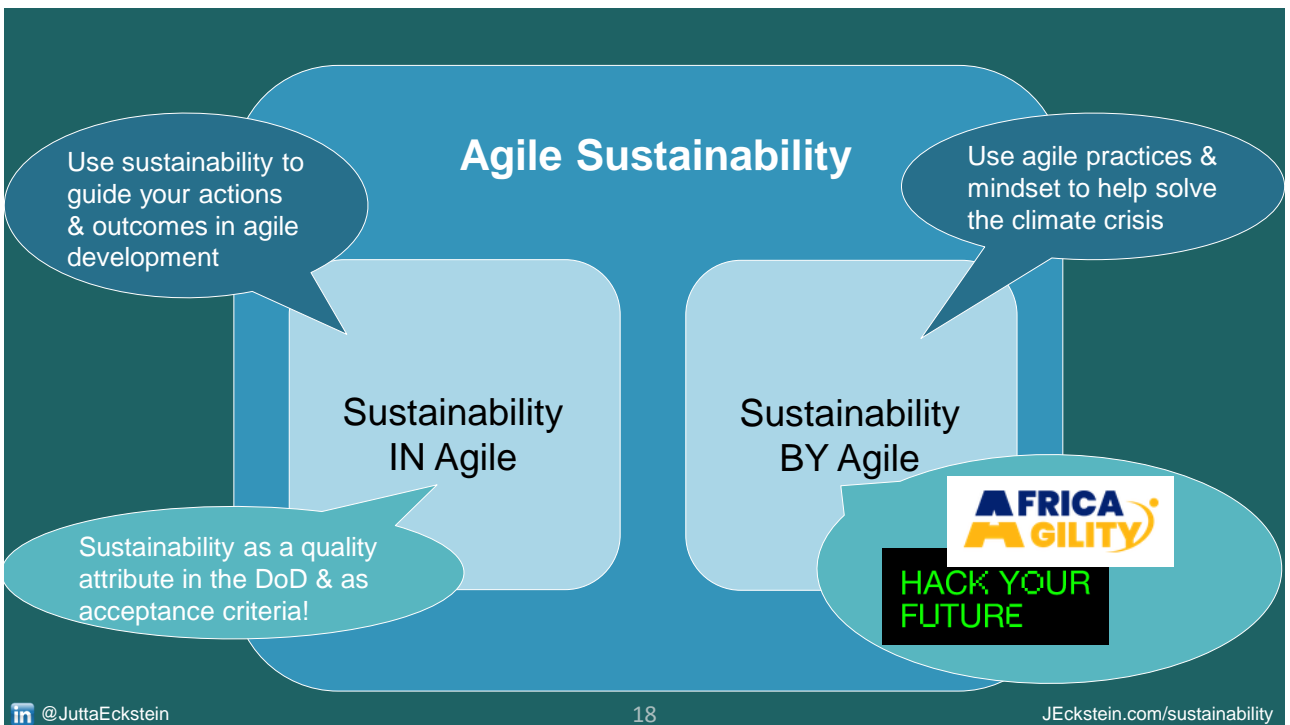
What? Facts

So what? Insights



Now what? This is what you can do!



















# Persona Spectrum

- Make your system accessible to everyone!

	Permanent	Temporary	Situational
Touch	 One arm	 Arm injury	 New parent
See	 Blind	 Cataract	 Distracted driver
Hear	 Deaf	 Ear infection	 Bartender
Speak	 Non-verbal	 Laryngitis	 Heavy accent

Source: ©David Dame, Microsoft, <https://bit.ly/3EYNdXk>

## Stories

Note: It's not about the form, it's about the content!

As a {insert user},  
I want to {insert users' want},  
So I can {insert value to the user}

With the impact of {insert impact on environment, social, etc.}

As a designer,  
I want to reduce the amount of font types,  
So the page performance will increase for users and pages will be more digestible,

**With the impact** of reduced CO2 emissions because of less data transfer.

# Fonts Excursion

Source: <https://siteefy.com/how-many-websites-are-there>

**1,106,671,903**

Currently, there are around **1.11 billion** websites in the World. **18%** of these websites are active, **82%** are inactive.

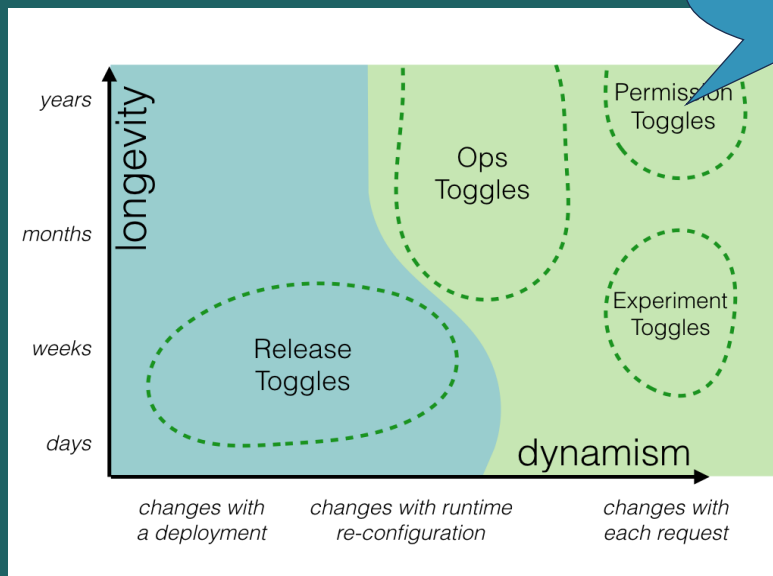
Font	CO2 emission per month (g)	CO2 emission per year (g)
-----	-----	-----
Google fonts	388,06	4656,72
Self-hosted fonts	218,73	2624,76
System fonts	42,89	514,68

Source: Lukasz Jedrasiak: <https://bit.ly/fontsImpactOnCarbonFootprint>

## Supporting Older Hardware

- **Sustainability Toggles**
  - Deactivate non-supported features
- **Responsive Design**
  - Recognize supported functionality on actual client

# Feature Toggles



Source: Pete Hodgson  
<https://martinfowler.com/articles/feature-toggles.html>

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24

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## Energy Aware Operations

- **Understand when**
  - Low-carbon electricity is available
  - Energy mix is renewable
- **Execute operations asynchronously at environmentally friendly times, like**
  - Tests
  - Non critical jobs



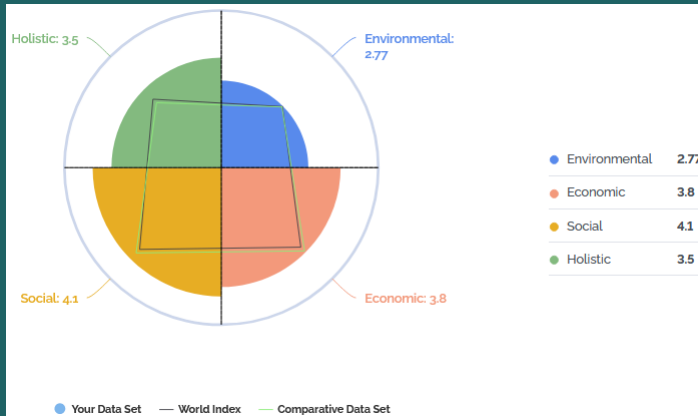
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25

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## Where do we stand?



### ■ Comparative Data Set:

- LeSS Conference 2023, Berlin

### ■ Highest value (good): 5

### ■ Full assessment available under (cc):

- <https://bit.ly/agile-sustainability>

# Change your Conversations for Increasing Sustainability!

# Many Thanks!



Support & sign: The **Agile Sustainability Manifesto**  
[agilesustainabilitymanifesto.org](https://agilesustainabilitymanifesto.org)



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<https://bit.ly/agile-sustainability>

<https://jeckstein.com/sustainability>

<https://bit.ly/AA-sustainability-initiative>

