CARBON FOOTPRINT OF DIGITAL SOLUTIONS

Niina Mikolanniemi

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VINCIT

AGENDA FOR TODAY

- Carbon emissions in digital industry and challenges in measuring

- Carbon footprint calculation of International Biathlon Union's app & website

- How can digital companies like Vincit decrease digital carbon footprint?

Niina Mikolanniemi
Sustainability Manager
Vincit
@nmikolanniemi

VINCIT IN NUMBERS

VINCIT AFTER THE MERGER (1.7.2022)

2007
FOUNDED

2016
FIRST NORTH

~850
EMPLOYEES

450+
CUSTOMERS

20%
WOMEN

30
NATIONALITIES

BILOT

27.0
REVENUE (M€)

VINCIT

61.5
REVENUE (M€)

2021 TOTAL

88.5
REVENUE (M€)

FINLAND Tampere, Helsinki, Turku, Oulu, Jyväskylä, Kuopio
SWEDEN Stockholm **POLAND** Poznan, Warsaw **USA** Irvine, Phoenix

IT'S DIGITAL, SO IT'S SUSTAINABLE - RIGHT?

Potential for 15% reduction in global emissions

Digital technology can create large positive handprint and help reduce carbon emissions by **up to 15%** in other sectors

While creating up to 5% of global emissions

ICT solutions cause between **1,5 percent to 5 percent** of global greenhouse gas emissions (compared to 2% for aviation industry)
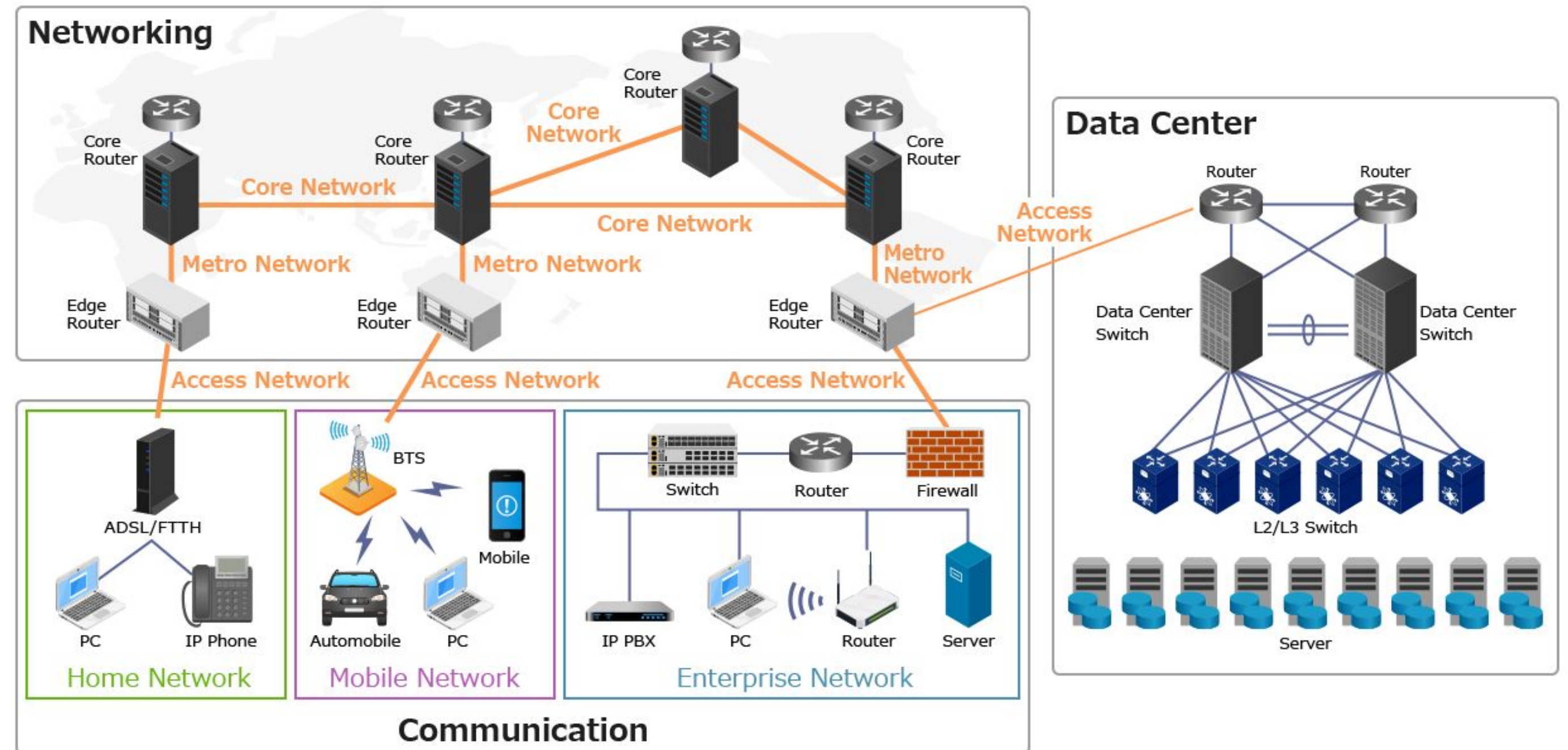
DIGITAL SOLUTION FOR BIATHLON FANS

1,2 million unique monthly users
during winter season

150 000
registered mobile & web users

Over 200 annual competitions
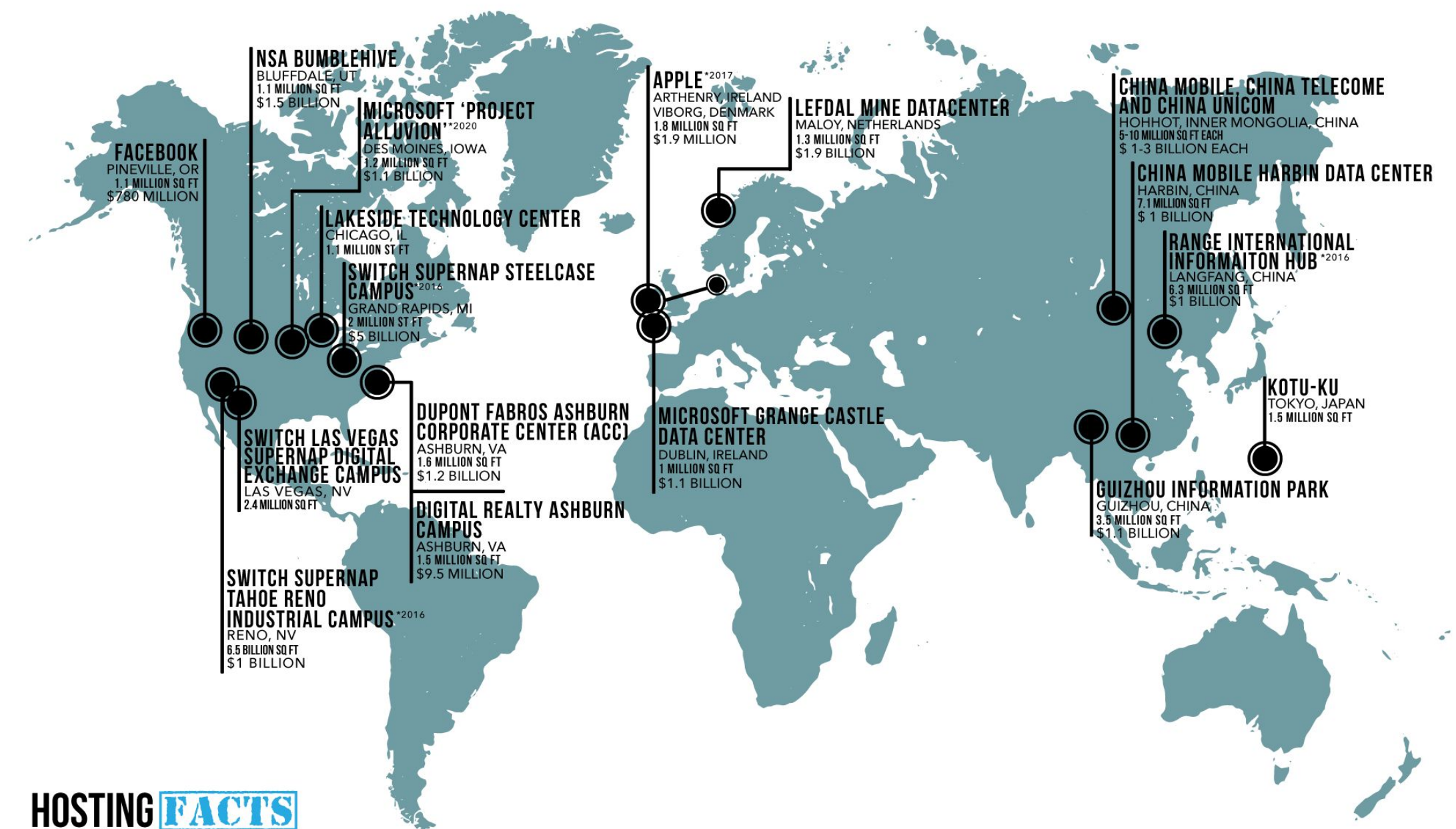with live streaming data

CARBON EMISSIONS IN THE DIGITAL INDUSTRY

Digital emissions are caused by **electricity** needed to run **infrastructure** and **data transfer** and emissions from **manufacturing** of physical devices
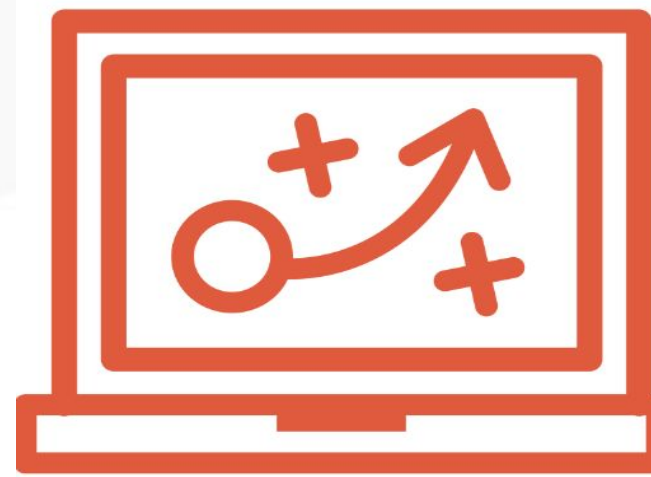
MEASURING DIGITAL EMISSIONS IS CHALLENGING

- Calculation was done together with carbon footprint consultancy **UseLess Company**

- Data transfer happens in data centres in different countries

- Cloud architecture combining several SaaS-services makes data collection a challenge

- Only few companies publish information on how the energy used for data transfer & storage is produced

In collaboration with **UseLess**

NSA BUMBLEHIVE
BLUFFDALE, UT
1.1 MILLION SQ FT
$1.5 BILLION

MICROSOFT 'PROJECT
ALLUVION'*2020
DES MOINES, IOWA
1.7 MILLION SQ FT
$1.1 BILLION

FACEBOOK
PINEVILLE, OR
1.1 MILLION SQ FT
$750 MILLION

LAKESIDE TECHNOLOGY CENTER
CHICAGO, IL
1.1 MILLION ST FT

SWITCH SUPERNAP STEELCASE
CAMPUS *2016
GRAND RAPIDS, MI
2 MILLION ST FT
$5 BILLION

SWITCH LAS VEGAS
SUPERNAP DIGITAL
EXCHANGE CAMPUS
LAS VEGAS, NV
2.4 MILLION SQ FT

DUPONT FABROS ASHBURN
CORPORATE CENTER (ACC)
ASHBURN, VA
1.8 MILLION SQ FT
$1.2 BILLION

DIGITAL REALTY ASHBURN
CAMPUS
ASHBURN, VA
1.5 MILLION SQ FT
$9.5 MILLION

SWITCH SUPERNAP
TAHOE RENO
INDUSTRIAL CAMPUS *2016
RENO, NV
6.5 BILLION SQ FT
$1 BILLION

APPLE *2017
ARTHENRY, IRELAND
VIBORG, DENMARK
1.8 MILLION SQ FT
$1.9 MILLION

LEFDAL MINE DATACENTER
MALOY, NETHERLANDS
1.3 MILLION SQ FT
$1.9 BILLION

MICROSOFT GRANGE CASTLE
DATA CENTER
DUBLIN, IRELAND
1 MILLION SQ FT
$1.1 BILLION

CHINA MOBILE, CHINA TELECOME
AND CHINA UNICOM
HOHHOT, INNER MONGOLIA, CHINA
5-10 MILLION SQ FT EACH
$ 1-3 BILLION EACH

CHINA MOBILE HARBIN DATA CENTER
HARBIN, CHINA
7.1 MILLION SQ FT
$ 1 BILLION

RANGE INTERNATIONAL
INFORMAITON HUB *2016
LANGFANG, CHINA
6.3 MILLION SQ FT
$1 BILLION

KOTU-KU
TOKYO, JAPAN
1.5 MILLION SQ FT

GUIZHOU INFORMATION PARK
GUIZHOU, CHINA
3.5 MILLION SQ FT
$1.1 BILLION

HOSTING **FACTS**

WHAT DOES THE CARBON FOOTPRINT LOOK LIKE?

App & website built by Vincit
9600 kg CO2 / year

=

Finnish
person's carbon
footprint / year

=

15 000 km with
petrol driven car

In collaboration with **UseLess**

TIPS TO MINIMIZE DIGITAL CARBON FOOTPRINT

Developers of digital services

- Calculate carbon footprint of services
- Design lean architecture and solutions
- Optimize asset sizes and capacity
- Switch to renewable cloud services
- Involve your partners and share carbon data

Users of digital services

- Switch mobile network to WiFi
- Switch to renewable electricity
- Upgrade devices less often and remember to recycle

THANK YOU <3

Niina Mikolanniemi
Sustainability manager

+358 40 761 1677
niina.mikolanniemi@vincit.fi