

AFRY

ÅF PÖYRY



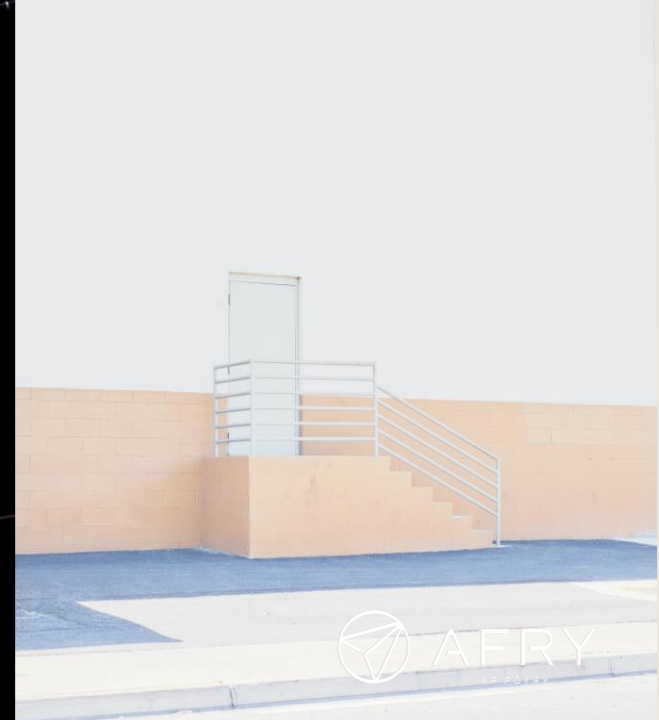
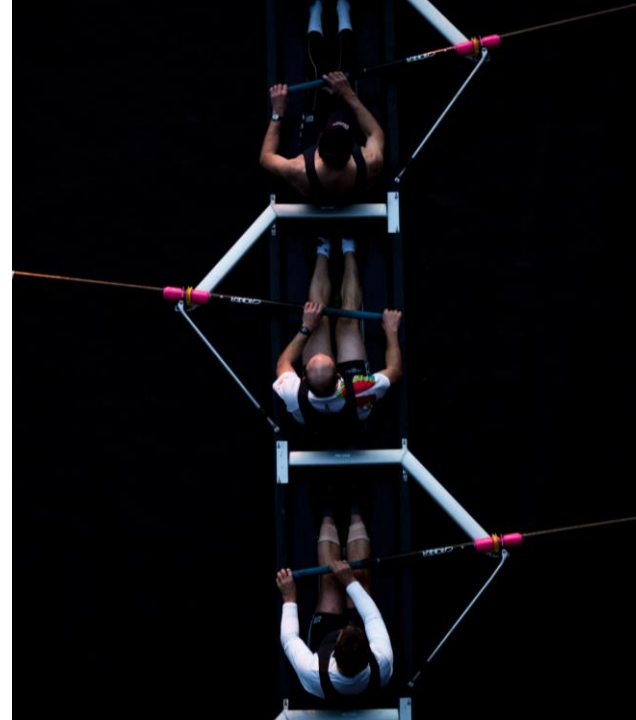
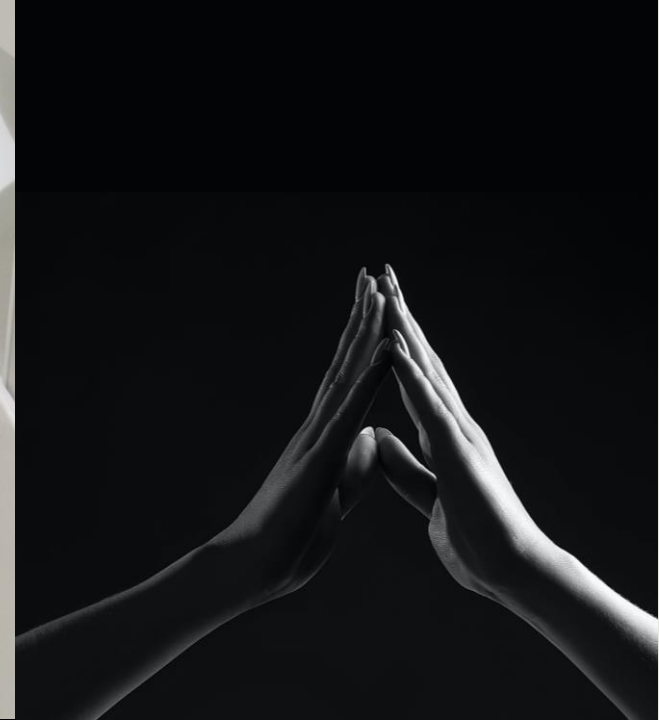
SUSTAINABLE VALUE CREATION OF THE CONSULTING SECTOR

Study for the Finnish Association of Consulting Firms

FINAL REPORT
VASARA/LEHTINEN/TAKAMÄKI/LE

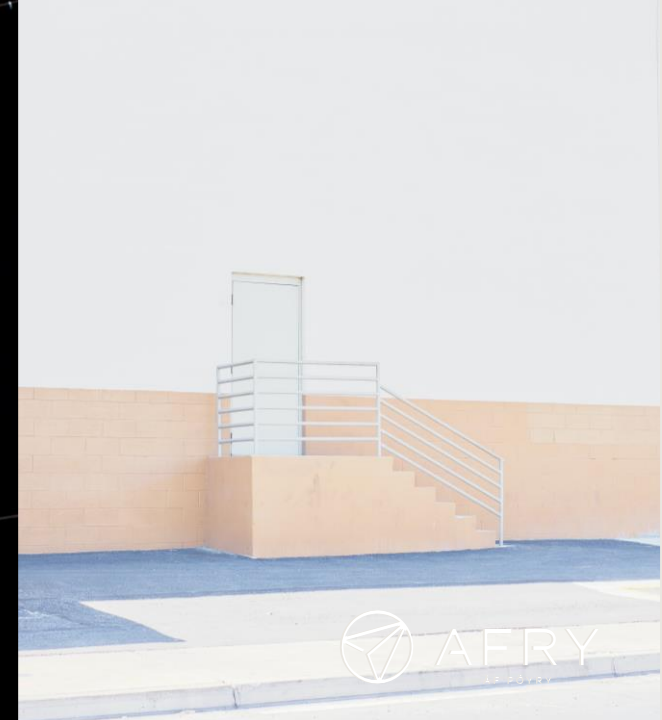
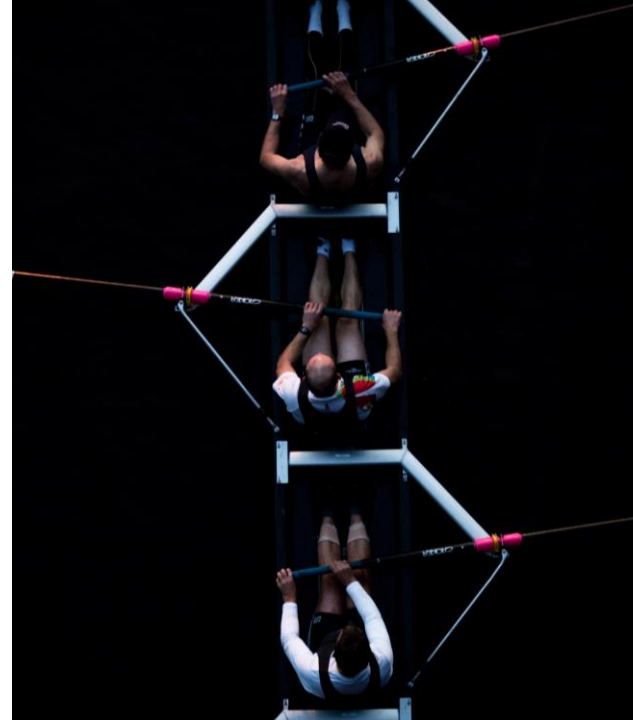
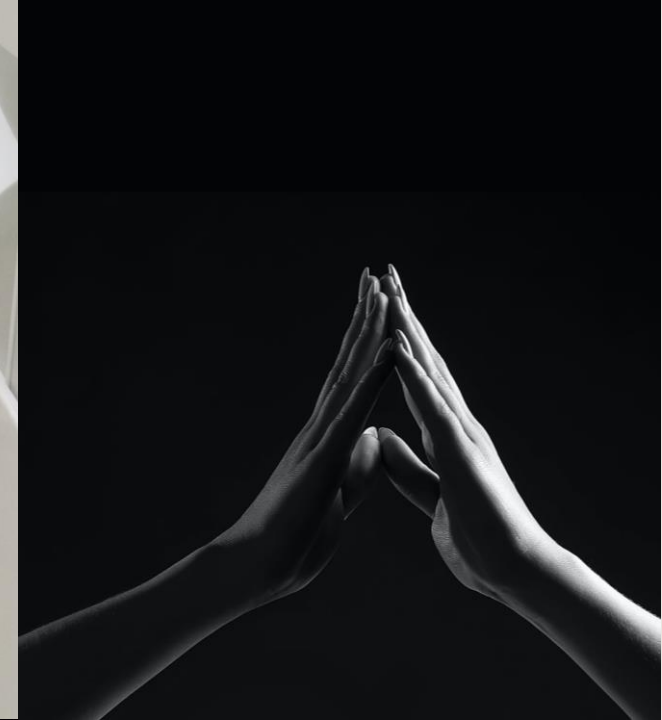
Content


1. The key messages
2. The social value created by the consulting sector
3. The low carbon roadmap and handprint of the consulting sector
 - 3.1 Footprint
 - 3.2 Handprint
4. Sustainable value creation of the consulting sector now and in the future



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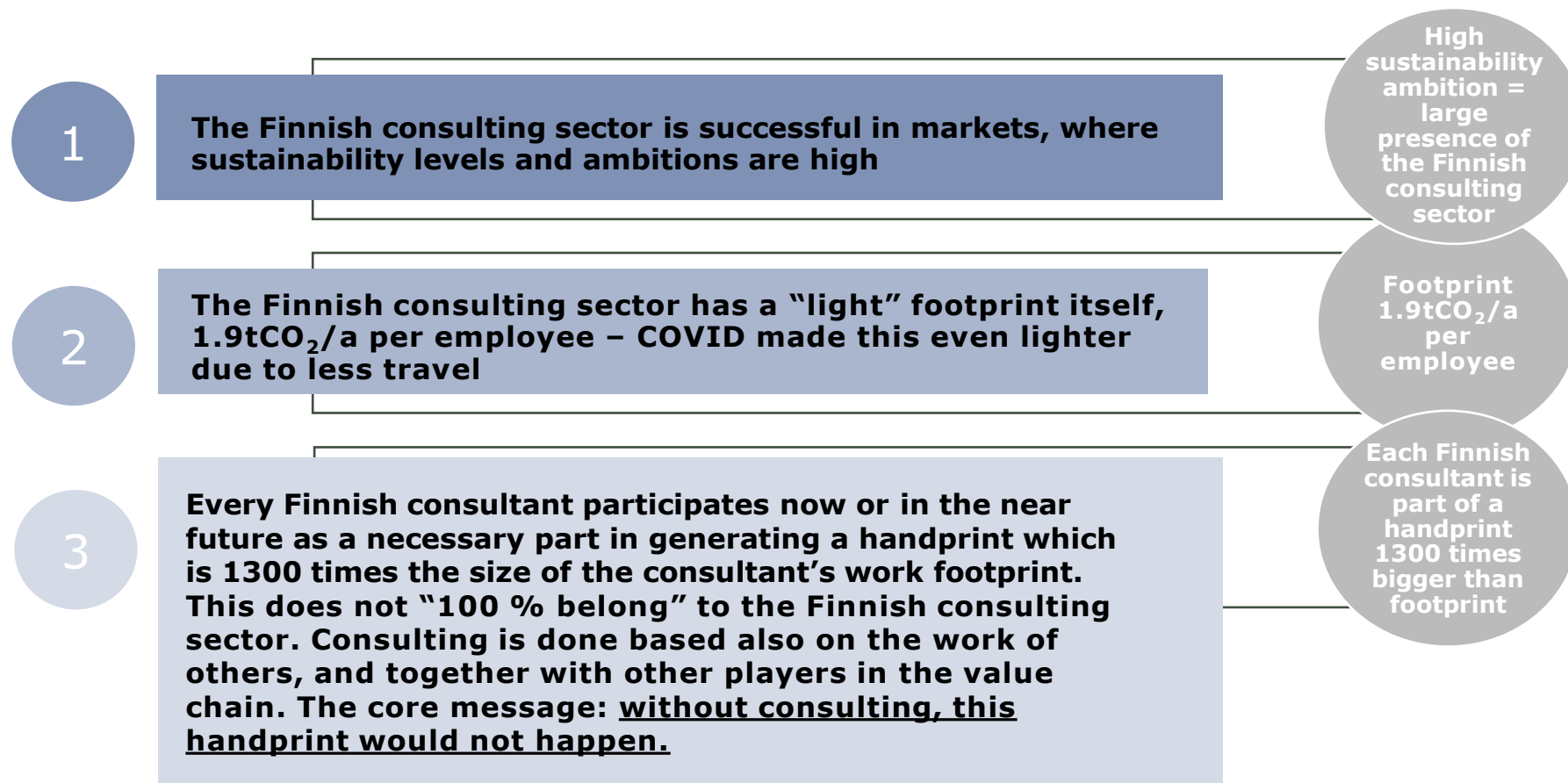




SUSTAINABLE VALUE CREATION OF THE FINNISH CONSULTING SECTOR

1. The key messages

Three key messages



The A-B-C-D of opportunities in sustainable value added consulting

A **dvancing wave by wave**, systematically, has happened “by itself”, but Finnish consulting now has a chance of planning the “fourth wave” to come. **Sustainable Development Goals (SDGs) offer one way to direct offering development** – the right mix of current strengths and new SDGs rising is a unique opportunity

B **ringing up to date** should not be an when-needed random process – **continuous renewal** is needed in an extremely volatile and changing business environment. A consulting company that is e.g. used to renewing 5-10 % of its offering every year has few problems adapting to market changes. For others, at worst, a complex process of trying to create a new offering is costly, takes too long, and may be obsolete at birth

C **limate** is not a new find. However, **linking climate consulting with other, existing and emerging Finnish consulting strengths** in a new way is. Climate should be so bound into consulting that it cannot be separated from it – instead of being “climate consultants”, Finnish successes in e.g. forest and process industry, infrastructure and energy can be so strongly reinforced with climate considerations that “no climate consultants are needed”

D **ata and information circular economy** are a secret weapon the Finnish consulting sector could use efficiently before anyone else. Consulting deals with information-to-insight. Gathering the information, analysing and producing the insights – and recycling the results for further sustainable value creation is not done by anyone at the moment. All the elements are present – they need to be put together

WHAT DOES THIS MEAN?

The Finnish consulting industry can create sustainable added value by providing world-class solutions domestically and internationally

1

WHERE AMBITIONS ARE HIGH, THE FINNISH CONSULTING SECTOR SUCCEEDS

The Finnish consulting sector currently sells more expert services to countries which are advanced in sustainable development – and we make them even more advanced.

2

THERE ARE MARKET GAPS BOTH IN SERVICES AND IN REGIONS

Sustainable Development Goals (SDGs) are a commonly accepted concept. Finnish consulting only covers part of the SDGs. Furthermore, the less sustainably developed a country is, the less the Finnish consulting sector currently is present.

3

KEEPING UP THE HIGH VOLUME OF ENGINEERING SERVICES DEMANDS QUICK AND CONTINUOUS ADAPTATION TO A CHANGING BUSINESS ENVIRONMENT

In some respects, the development speed needs to increase.

4

CIRCULAR ECONOMY OF INFORMATION IS A KEY ASSET IN KEEPING UP EXPERT POOLS OF THE FINNISH CONSULTING SECTOR

The Finnish consulting sector needs to generate even more information, extract insight and new information from that, and add value to the information in a “circular economy of information”.

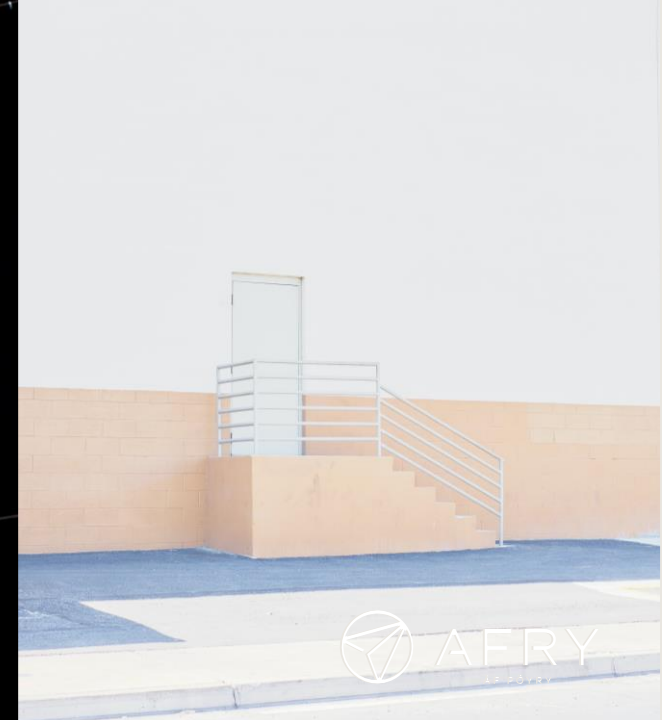
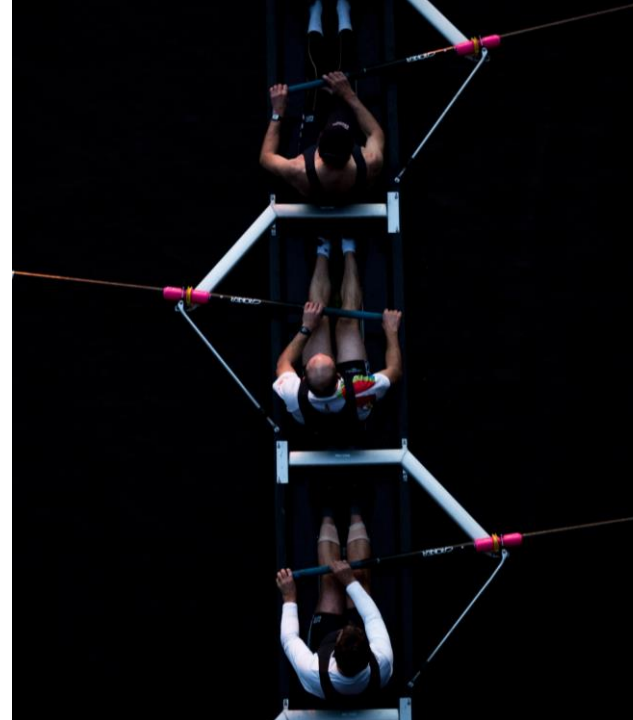
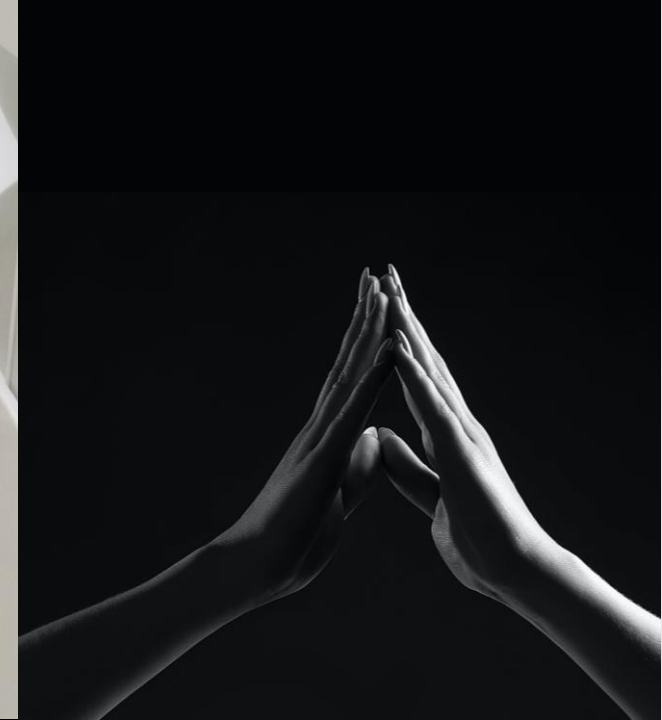
5

THERE'S A FOURTH WAVE OF CONSULTING COMING AND THE FINNISH CONSULTING SECTOR HANDPRINT IS A KEY ELEMENT OF IT

The changes from the start of Finnish consulting to now and the future are notable – but deep expertise has always been one foundation.

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2. The social value created by the consulting sector





Why does consulting exist?

There are good reasons...

The target and why it is somewhat elusive

WHAT TO SHOW IN ADDED VALUE?

AN ACTIVITY

- Analysing a clearly defined activity, consulting

THE OUTCOME OF THAT ACTIVITY

- What is the impact of consulting?

LET'S TALK ABOUT "COLLABORATIVE IMPACT"

- Consulting, global policies, national authorities, local authorities, local population, technology developers etc – all contribute

THE CONSULTING VALUE CHAIN IMPACT

- Consulting goes from vision to a concrete plant or building/transport medium built and running as optimally as possible. Without the beginning, the end is different; without the end, nothing tangible happens.

THE MAIN THING IS **NOT TO BE TOO CONCERNED BY WHICH PRECISE CONSULTING GENRE DESERVES CREDIT** FOR HOW MUCH OF REAL WORLD EVENTS

WHY A PARTICULAR ASPECT IS DIFFICULT?

...BUT WHAT IS THE ACTIVITY?

- Defining consulting also for outsiders

DEFINING SHARE OF CONSULTING

- On a general level in SDGs, it is hard to show what part of improvement comes from consulting activity and what has another root cause

IT IS A JOINT OUTCOME

- Especially in difficult-to-split cases, let's describe joint impact. E.g. on national level: if an SDG has improved, and consulting has increased, how much of the additionality is consulting? Consulting is part of it, but too clear boundaries are hard to draw

IT IS A VALUE CHAIN – AND FINLAND HAS IN MANY CASES ALL COMPONENTS

- Cases from choosing strategic ideas to building site supervision: all have their place.

What is meant by SKOL?

In this study, SKOL refers to the member companies of SKOL, not the organization SKOL, which does not do consulting



From hence on, SKOL = Member companies of SKOL, unless otherwise stated

Who are the SKOL members and how do they contribute to society?

- SKOL is the industry and employers' **organization for independent consulting firms**
 - Members of the Finnish Association of Consulting Firms SKOL provide consultancy in technical matters applying engineering, design and architectural expertise to solve problems
 - The SKOL consulting companies work at **municipal, building, service and industrial sectors** covering a broad scope of activities listed in the appendix. However, this is not
 - the full scope possible (Finnish consulting does not cover all)
 - static: the scope is changing also in areas where Finnish consulting is strong
 - 150 member companies of SKOL employ about 19 000 people in Finland
 - SKOL members cover over 2/3 of the total engineering consulting capacity in Finland
- SKOL promotes professional, independent, sustainable and ethical design and consulting engineering

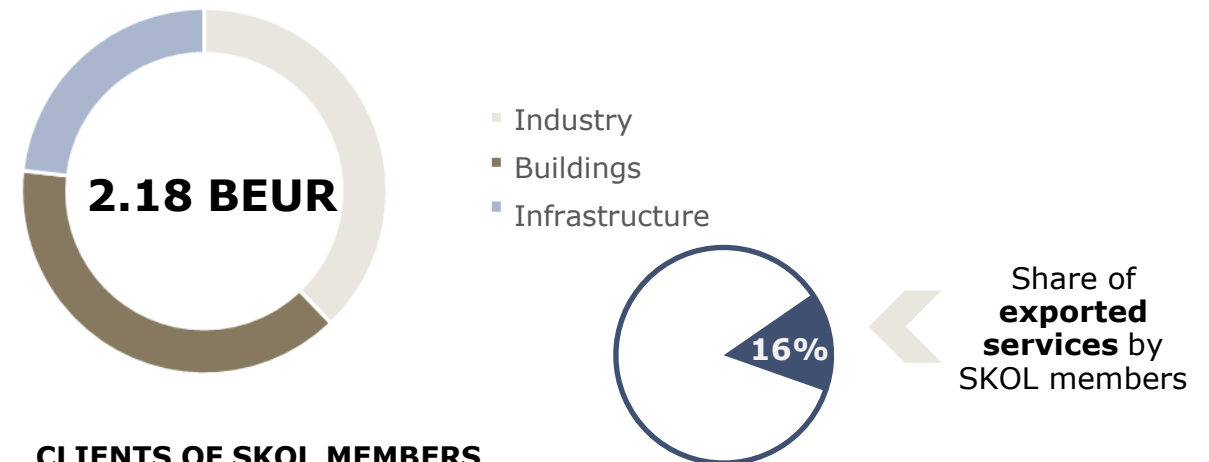
SKOL Mission

We promote good Finnish planning and consulting that solves significant future challenges for society and business.

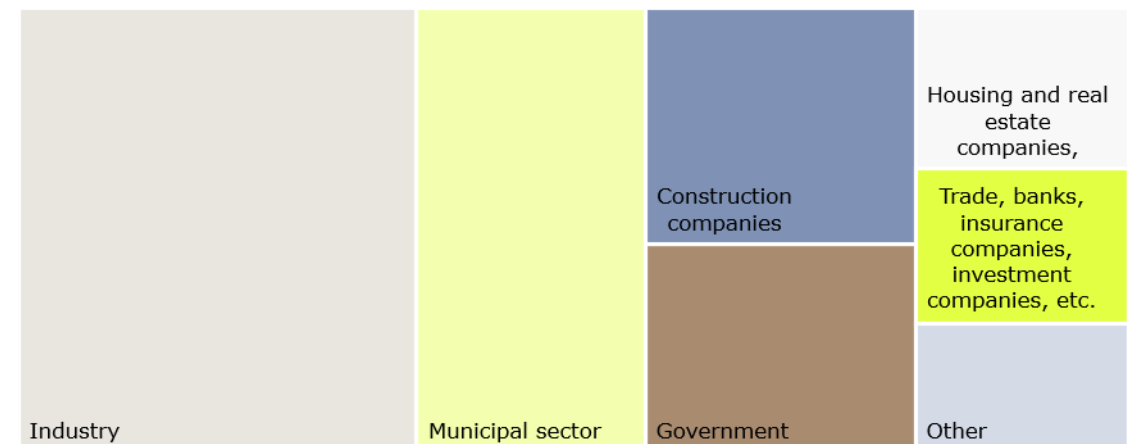
SKOL Vision

SKOL is renewing a socially significant planning and consulting industry that succeeds in creating value for customers.

TURNOVER OF SKOL MEMBERS

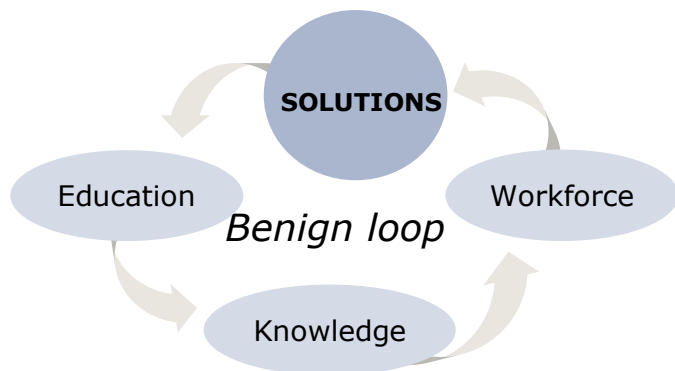


CLIENTS OF SKOL MEMBERS



What is SKOL's role as part of society?

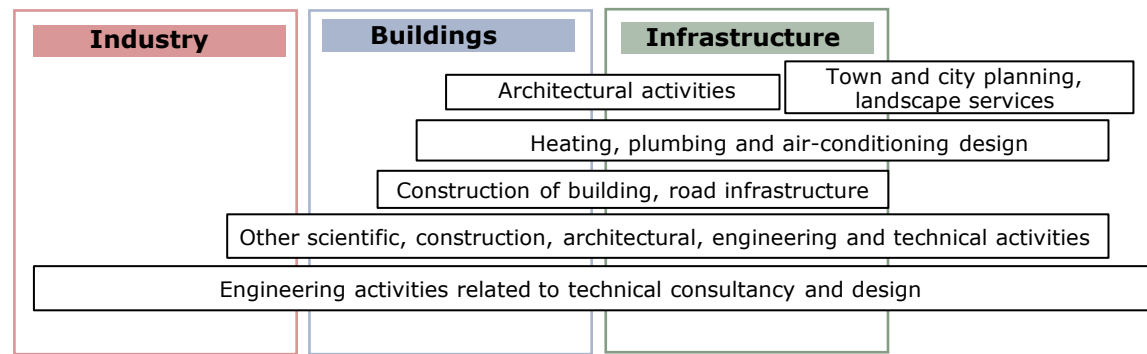
- SKOL's strategy 2019-2021 showcases and highlights the significance of consulting as part of societal development
 - For a strategy that strongly relies on sustainable development, it is valuable to establish a framework to define sustainable value added and an overview of the sector's contributions and to align the activity with the vision and mission of SKOL
- There is a "**benign loop**" possibility: society needs certain solutions; consulting provides those solutions; society changes to need more advanced solutions – and consulting keeps providing the more and more demanding answers



SKOL STRATEGIC THEMES

- 1** The voice of experts is in the best interests of the development of society.
- 2** The best knowledge and skills drive growth and development.
- 3** Multidisciplinary ecosystems create vitality for the sector.
- 4** SKOL will be strengthened to provide better service to members

SKOL SUB-SECTORS AND PROVIDED PROFESSIONAL SERVICES

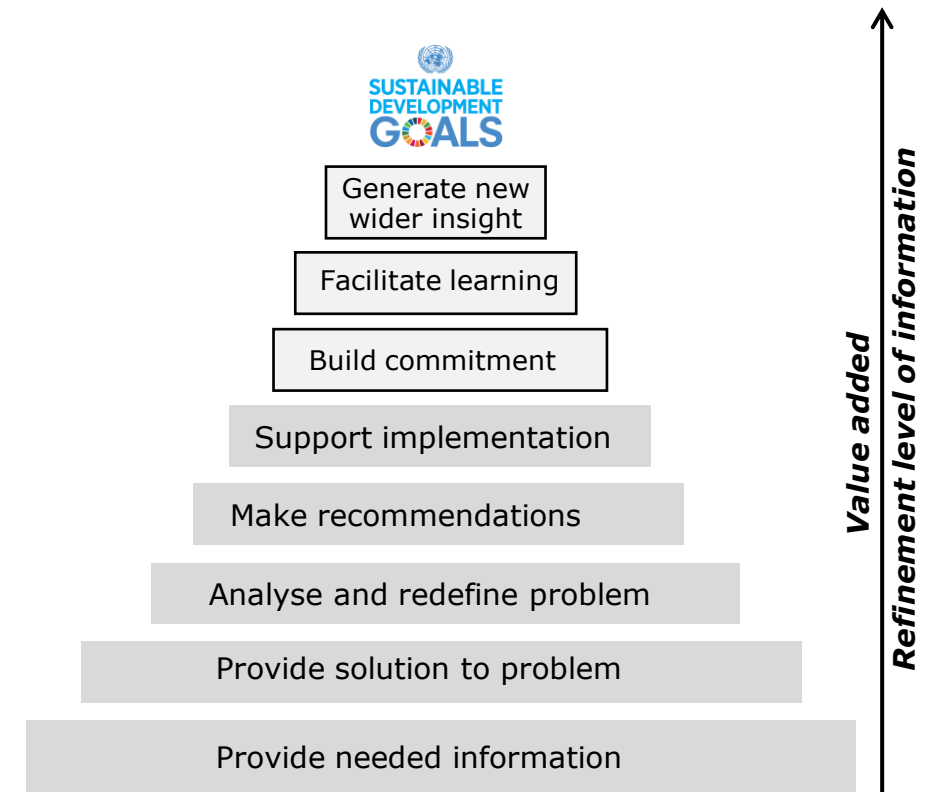


IT IS TIME TO PONDER AND BE CRITICAL

What is the role of consulting in a society? Abstract pyramids become tangible value.

- Consultants **facilitate change in entities** (from individuals via companies to nations and unions of nations) and enable them to reach desired outcomes whether these are related to expansion of financial productivity, changes in production capacity or innovation
- **Companies contribute to sustainability only if the value created exceeds the external cost caused**
- “Opposite of sustainable added value” is consulting that helps to destroy value. In the values and principles of SKOL and its members, this is already excluded, but it is not always easy to assess whether a specific project adds value.

HIERARCHY OF CONSULTING TARGETS



<https://hbr.org/1982/09/consulting-is-more-than-giving-advice>, <https://docs.google.com/viewerng/viewer?url=https://www.acenet.co.uk/media/4458/foc-a5-overview-2019.pdf>

Collaborative impact via sustainable value added by the Finnish consulting sector

DO YOU MAKE BUSINESS SUSTAINABLY OR MAKE SUSTAINABLE BUSINESS?

- Companies contribute to sustainability only if the value created exceeds the external cost caused
- Sustainable value added is understood as **additional sustainable features that are added on top the features provided by the baseline assignment**. Features may be economic, social or environmental benefits that contribute to Sustainable Development Goals
- Sustainable value added provides long-term benefits for the client, society and consultant
- Shared value is defined as practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates

“Transparent and truly additional sustainability contributions are not only warmly welcomed by clients but a minimum requirement and a ‘license to operate’ in the future”

An aerial photograph of ocean waves, showing the intricate patterns of white foam and deep blue-green water. The waves are breaking, creating a dynamic and textured surface.

The four waves of Finnish consulting and SDGs

A growing wave to surf, with amount of SDGs consulted in increasing

SDGs were not the starting point of consulting, but they have gained an increasing role even in strategic decisions

- **Consulting existed long before SDGs**
- **Consultants help clients solve problems and meet goals. When SDGs are part of clients' goals, they become part of consultants' goals. Likewise, consultants may be proactive and propose to clients solutions steered by SDGs**
The overarching principle of consulting is to help clients meet their goals, and thus, they become an integral part of design and consulting services when SDGs reshaped clients' business strategies
- **The SDG pressure is likely to increase and develop from at least four directions**
The role of SDGs is increasing for consulting.
 - **The world** has developed in a direction where especially e.g. climate SDGs cannot be ignored.
 - **The clients**, whether leaders or followers, have to have a "license to operate" on markets following SDGs.
 - **The consumers** bring further pressure onto clients and politicians.
 - **The consulting companies themselves**, SDGs have been and are being adopted by many.
- **SDGs are 17 in number, and an 17-pronged strategy is not easy**
Although consulting influences all the SDGs either directly or indirectly, the most relevant SDGs shall be prioritized in our analysis. SDGs are linked in multiple ways, but still it is possible to compare the focus of Finnish consulting and SDGs
- **Which SDGs should be prioritised?**
To provide a comprehensive approach for analysing the impact of consulting and design companies for society, the following criteria is used **identify most relevant SDGs and SDG targets to be prioritized in analysing Finnish consultancy:**
 - Is it already a focus of Finnish consulting, domestically and abroad?
 - Is it seen as an emerging area with consulting opportunities?
 - Is it simply something that is a "license to operate" for Finnish consulting companies?

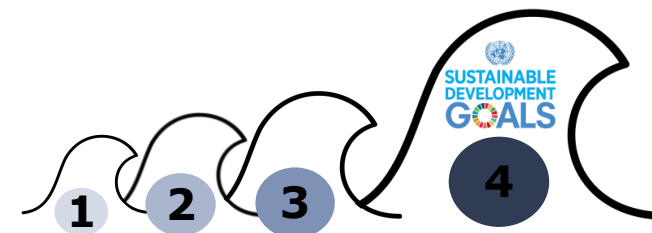
PRIMARY TO THE FINNISH CONSULTING SECTOR



EMERGING SDG AREAS FOR THE FINNISH CONSULTING SECTOR



What are the waves of Finnish consultancy?



CONTRIBUTIONS TO KEY SDGs

1st wave of consultancy ~1930-1970 "Building and rebuilding"

A few stably growing consultants, with strong Finnish industries (e.g. forest and infrastructure) particularly paper industry, mainly domestic



2nd wave of consultancy ~1970-2010 "Globalising and widening scope"

Globalisation starting from forest industry. Growing number of market players, with international chains taking root, more sectors covered and Nokia pulling ICT along



3rd wave of consultancy ~2010-2025 "Complex solutions with even greater focus on sustainability"

Finnish domestic market still dominates, but Finnish issues are very much global issues. Consultants likewise work globally on difficult and complex issues, special focus on climate change, energy and material transition, emergence of artificial intelligence and smart applications



4th wave of consultancy ~2025- "Reshaping consultancy for change in a changing world"

Consultants reorganise their workways, the focus of consulting, apply digital solutions and AI, and maximize their (global) handprint to reduce emissions and tackle biodiversity loss, large-scale societal electrification, alternative lifestyles, zero-emission technologies. Education, justice, poverty take on a larger role

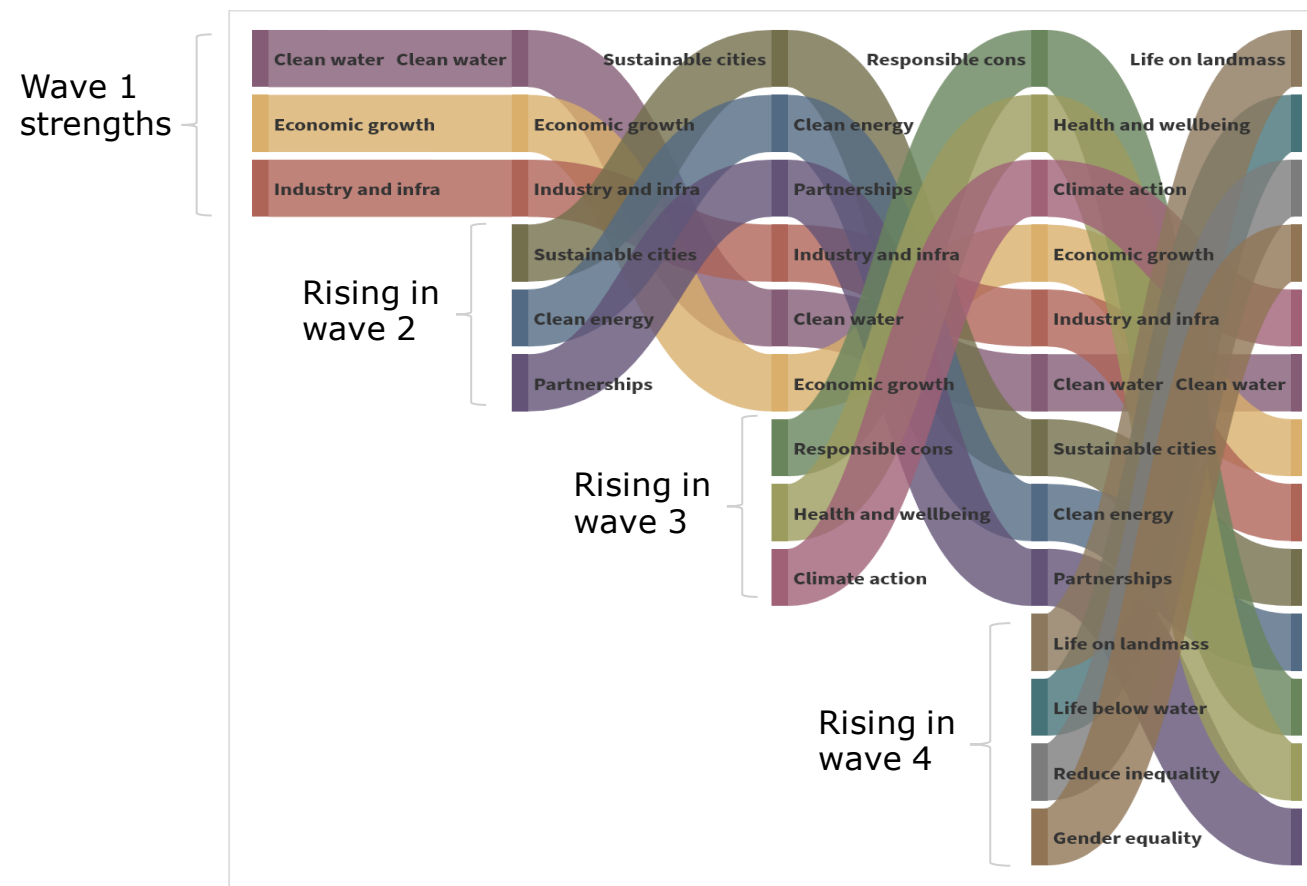


"Cresting the wave": cumulating knowhow and consulting by SDGs

BUILD AND KEEP UP

- Again, markets determine a great deal of the action
- However, the Finnish consulting sector has to
 - keep up knowledge in existing consulting
 - build up new consulting, **with emphasis in development** changing by wave

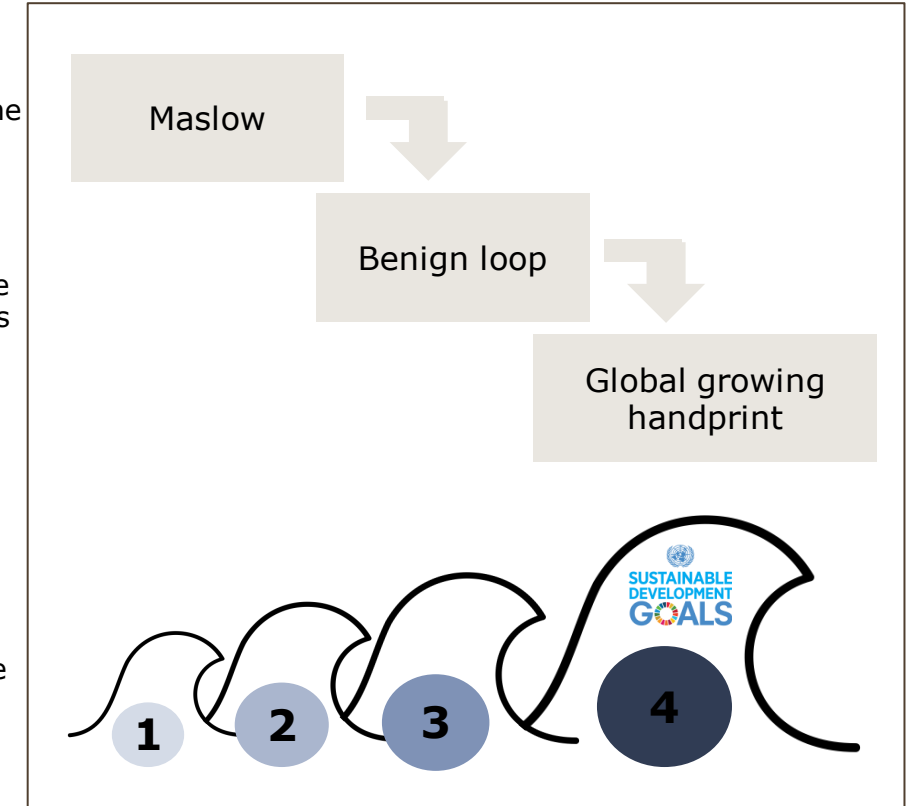
SDG'S PER WAVE OF CONSULTING



How has Finnish consulting managed to surf these waves?

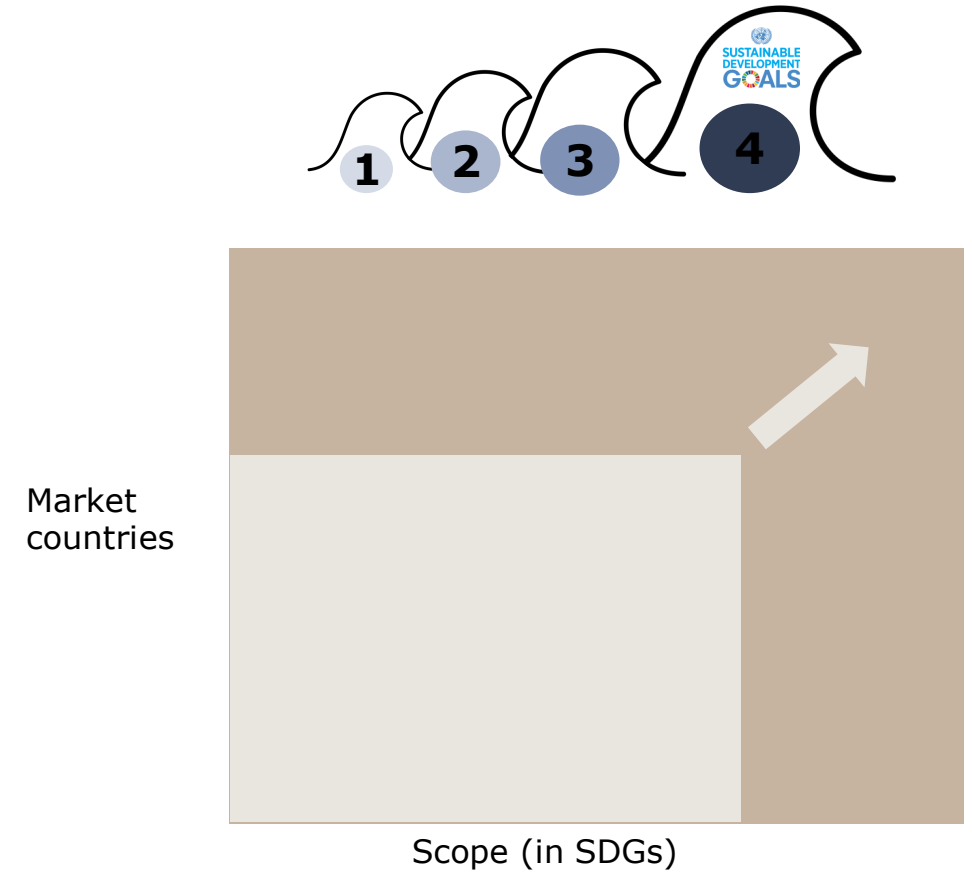
GLOBAL POSITIONING OF FINNISH CONSULTING

- **Finland is in a lucky position where basic human needs are to a very great degree met;** water, sanitation, shelter, energy, nutrition and a decent living standard is provided to the members of society. Consultancy has had its role in improving the Finnish standard of living, with major contributions in increasing the economic growth, developing the infrastructure and industry.
- **Again, a “benign loop”**
Again, a “benign loop” in action. If needs are met, including education, more knowledge can be generated among a larger pool of the workforce. The knowledge brings solutions, and solutions improve Finland and can be exported. An improved Finland breeds further knowledge, and the loop continues.
- **Growing handprint**
Due to the above, **Finnish consultancy companies have potential to deliver solutions aligned with the SDGs to the other parts of the world.** These solutions are emphasized particularly in the 2nd, 3rd and 4th wave of Finnish consultancy.
- **Danger of breaking the “benign loop”**
The competition is intense, and exponentially more knowledge is created. For a small pool of talent, a slowing down or diminishing of knowledge acquisition of education brakes down and potentially stops the knowledge growth. Unfortunately, it does not take much to destabilise the current good situation, but a lot to restore it.



Wave 4: Expanding in scope and regionally, with ever greater handprint

- **Scope**
 - continuous improvement of stable and growing markets with focus SDGs; expanding by market demand and growth opportunity
- **Market countries**
 - a wider basket, partly assuring stability against cycles, partly filling gaps in markets and opening new areas





The cake of policy and consulting goals

Business, policy and sustainability are tightly interwoven

How do SDGs, Finnish policy goals and consulting strategies go hand in hand?

- **No central planning authority**
There is no “central authority” that coordinates national consulting with 5-year plans
- **Acting according to values of society**
However, consulting exists to improve things in a way that the world, starting with our own Finnish society, accepts and promotes

– **Equation:**

**Domains
adaptation**

What to consult in

+ Goals

How to act

+ Policy

Where to fit in



DOMAINS

Domains to consult in

ECONOMY



Companies strive to be economically viable while paying taxes, creating jobs and increasing societal well-being

SOCIETY



Society encompasses the physical surroundings (infrastructure and biosphere) and humans, in addition to the interaction that takes place between these two

BIOSPHERE



Biosphere refers to the flora and fauna as well as the biogeochemical cycle in the Earth that provide the foundations for life

Domains
where to
consult

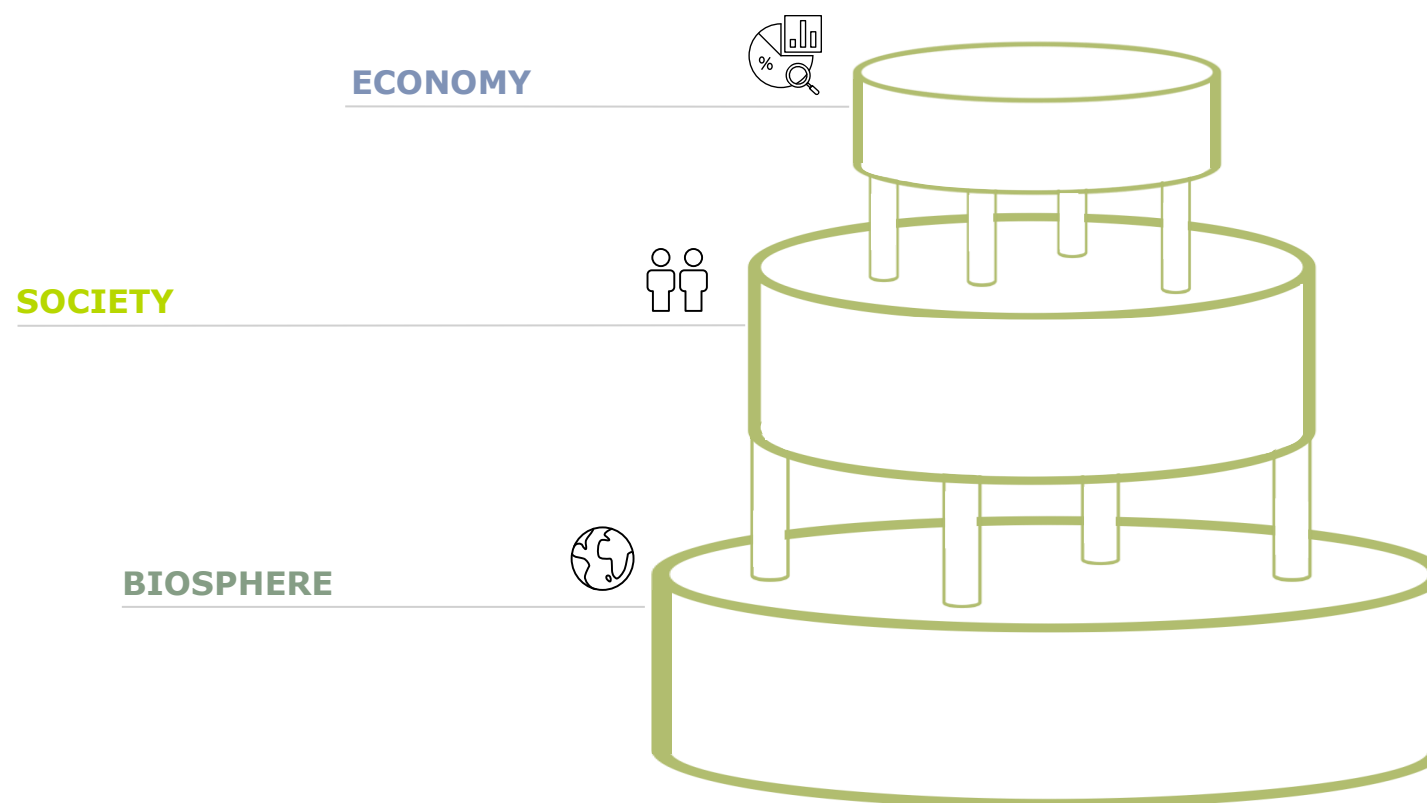
Goals to
targets

Policies
to adapt
to



Goals to target: a wedding of strategic directions and actions

The “Wedding cake” model was originally introduced by Stockholm Resilience Center (2016) to illustrate how economy serves society within the boundary limits and aims to move away from the narrative where economical, social and ecological developments are seen as separate entities



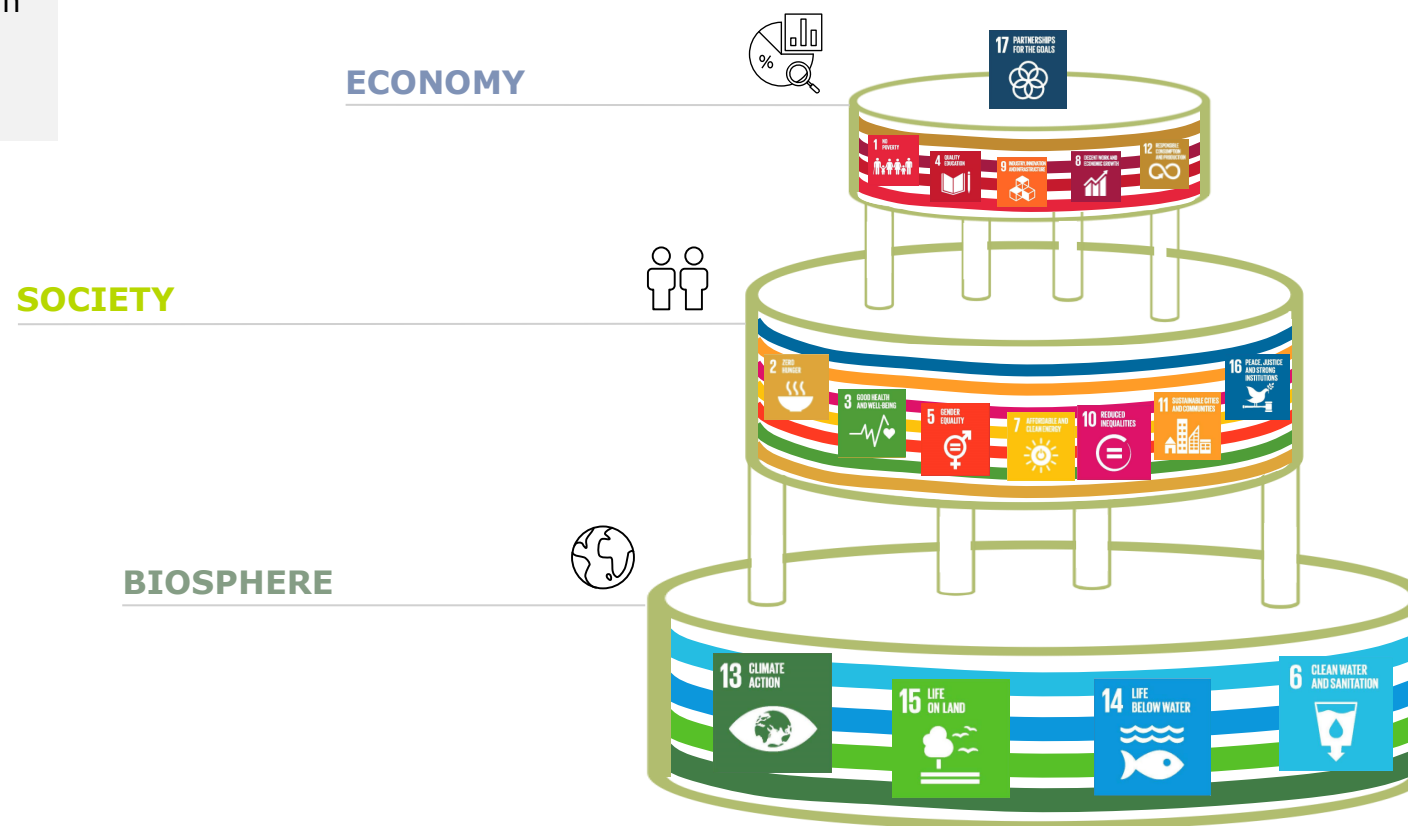
Goals to target: a layered cake of directions and actions

The “Layered cake” model prioritizes SDGs and puts them in a hierarchical order to highlight economic dependence on the biosphere

Domains
where to consult

Goals to targets

Policies
to adapt to



Finnish policy goals – what do they mean?

Domains
where to
consult

Goals to
targets

Policies
to adapt
to

ECONOMY



- Sustainable **employment**
- **Resource-wise economy**

EXAMPLES

- Improved employment rate
- Decreased pay gap between men and women
- Skillful workforce
- Multi-purpose use of the existing resources
- Sharing economy and circular economy
- Inclusion of externalities

SOCIETY



- **Participatory society** for citizens
- Equal prospects for **well-being**
- Sustainable **society and local communities**
- **Carbon-neutral** society

- Participation in civil society
- High voting activity
- Low income disparities
- Life satisfaction
- Equality between residential areas
- Adaptation to ageing population, urbanisation and climate change
- Low GHG emissions and growing carbon sinks
- Energy efficiency and renewable energy

BIOSPHERE



- **Lifestyles** respectful of the carrying capacity of nature
- **Decision-making** respectful of nature

- Healthy lifestyles, resource-wise and plant-based lifestyles
- Sustainability as a basis of all decision-making, planning and budgeting both in private and public sector

Finland wants to make policy decisions that support the achievement of Sustainable Development goals

→ The 8 objectives of the Society's Commitment carry out the 17 goals of the 2030 Agenda.

Finnish policy goals from Government program are aligned with SDGs

FINNISH POLICY GOALS

ECONOMY

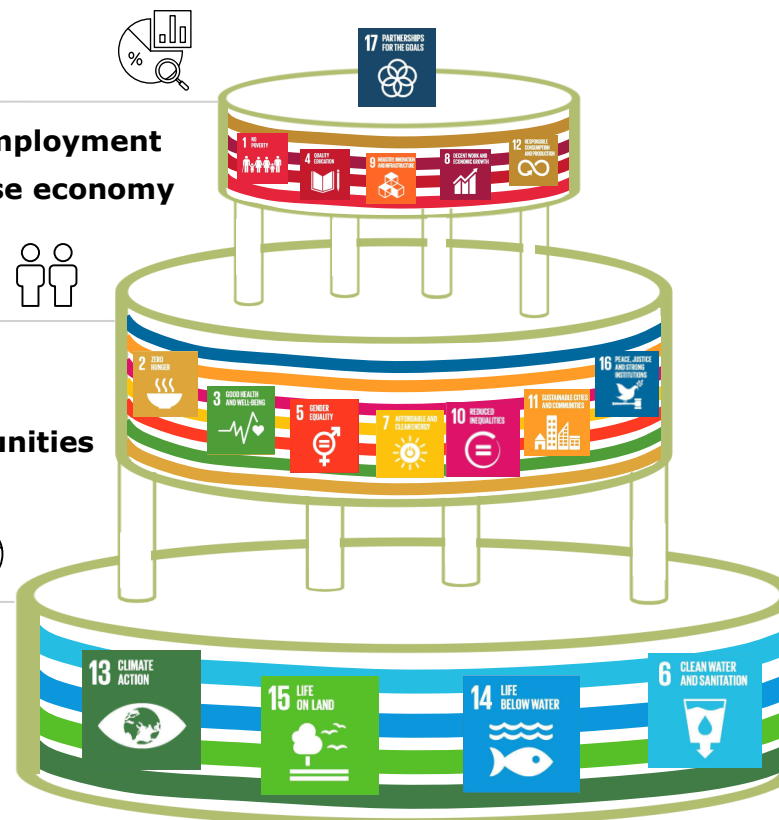
- Sustainable **employment**
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SOCIETY

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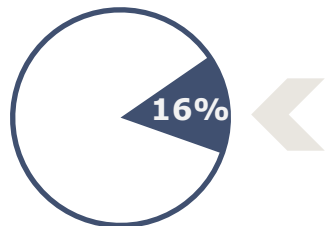


Link between SDGs, sustainability ambitions and the Finnish consulting sector success

The Finnish consulting sector thrives where sustainability levels and ambitions are already high

The current focus of professional services exports

- In 2019, Finnish exports were 95,6 B€, where services accounted for 32% of the exports and the role “other business services” was around 6%
- Other business services include Professional and management consulting; Technical, trade-related; and R&D services



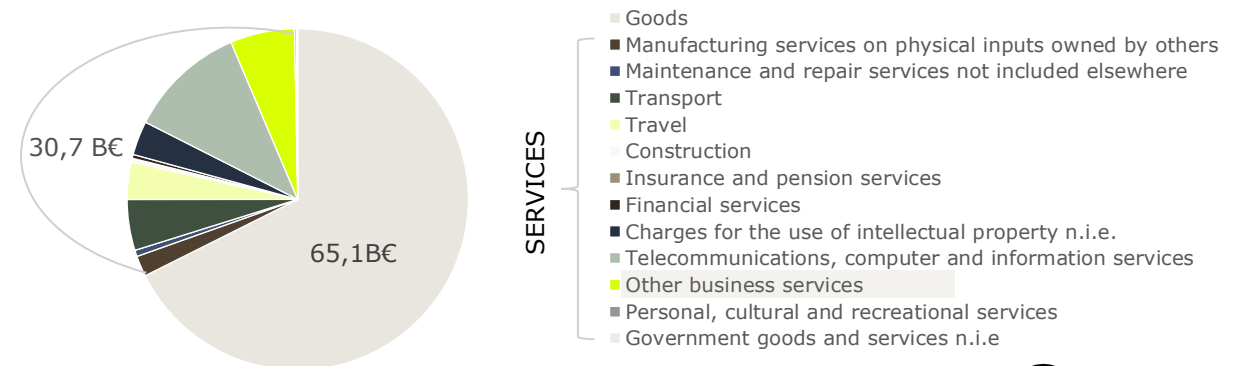
Share of **exported services** by the Finnish consulting sector*

* The data covers SKOL members only

FINNISH EXPORT OF PROFESSIONAL SERVICES (2019)



FINNISH EXPORT OF PROFESSIONAL GOODS & SERVICES (2019)



As opposed to normal parliaments, the "The Finnish Consulting Parliament of Services" is meant to grow the amount of seats

THE POWER TO CHANGE

– The power to change

The power to change and have a positive handprint depend on the markets, turnover and the green ratio of "tCO2/EUR"

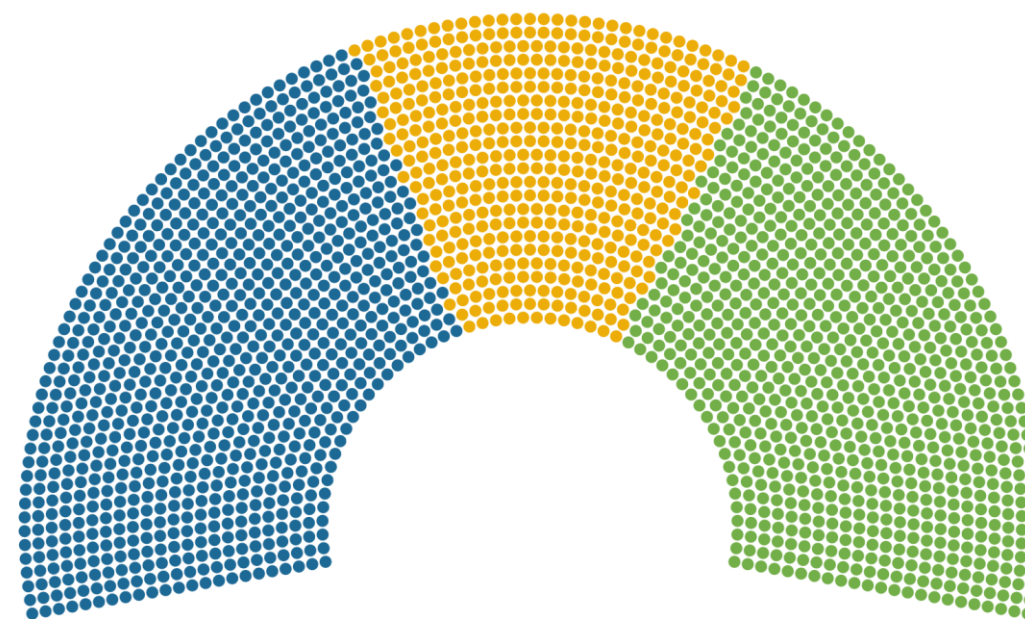
– "The Finnish Consulting Parliament"

As has been seen, the *EU Parliament and country parliaments* in Finland and elsewhere define, with legislation, how well the Finnish consulting sector can influence things by a large handprint. *Inside the Finnish consulting industry, the larger a sector and the more impactful its offerings, the greater the potential.* On the right, the "Finnish Consulting Parliament" by 1 seat = 1 MEUR turnover.

– A growing parliament with more impact from each seat

If a member of the Finnish Consulting Parliament is 1 MEUR of the Finnish consulting sector services – the desire is to get more seats, and that each seat generates a greater handprint

THE FINNISH CONSULTING PARLIAMENT OF SERVICES (1 SEAT = 1 MEUR OF TURNOVER)



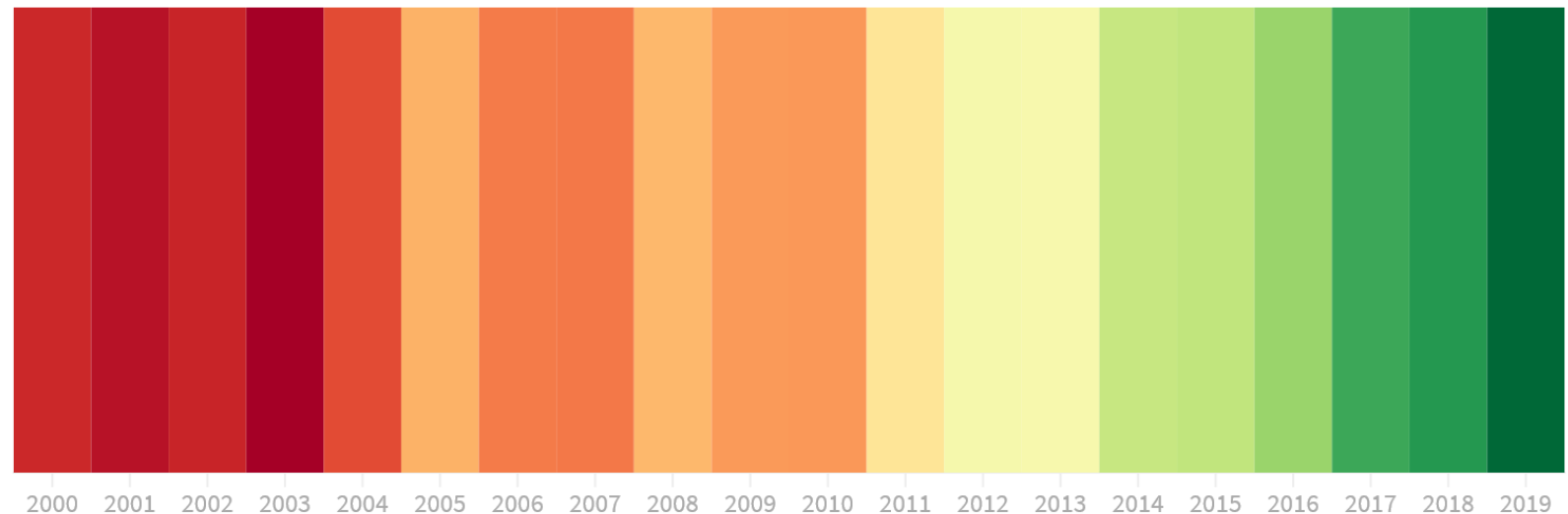
Consulting Sector	2019	Seat change
Industry	848	0
Infrastructure	488	0
Buildings	784	0

"Climate stripes" for key client countries

- "Climate stripes" is a visualisation made popular by Ed Hawkins.
- Here, we have taken the 2000-2019 development of the SDG subindex "GHG Intensity", averaged over 5 top market countries for the Finnish consulting sector: Finland, Sweden, UK, Germany, Netherlands.
- **GHG intensity of energy consumption** expresses how many tons CO₂ equivalents of energy-related GHGs are being emitted. The year 2000 is indexed to 100.

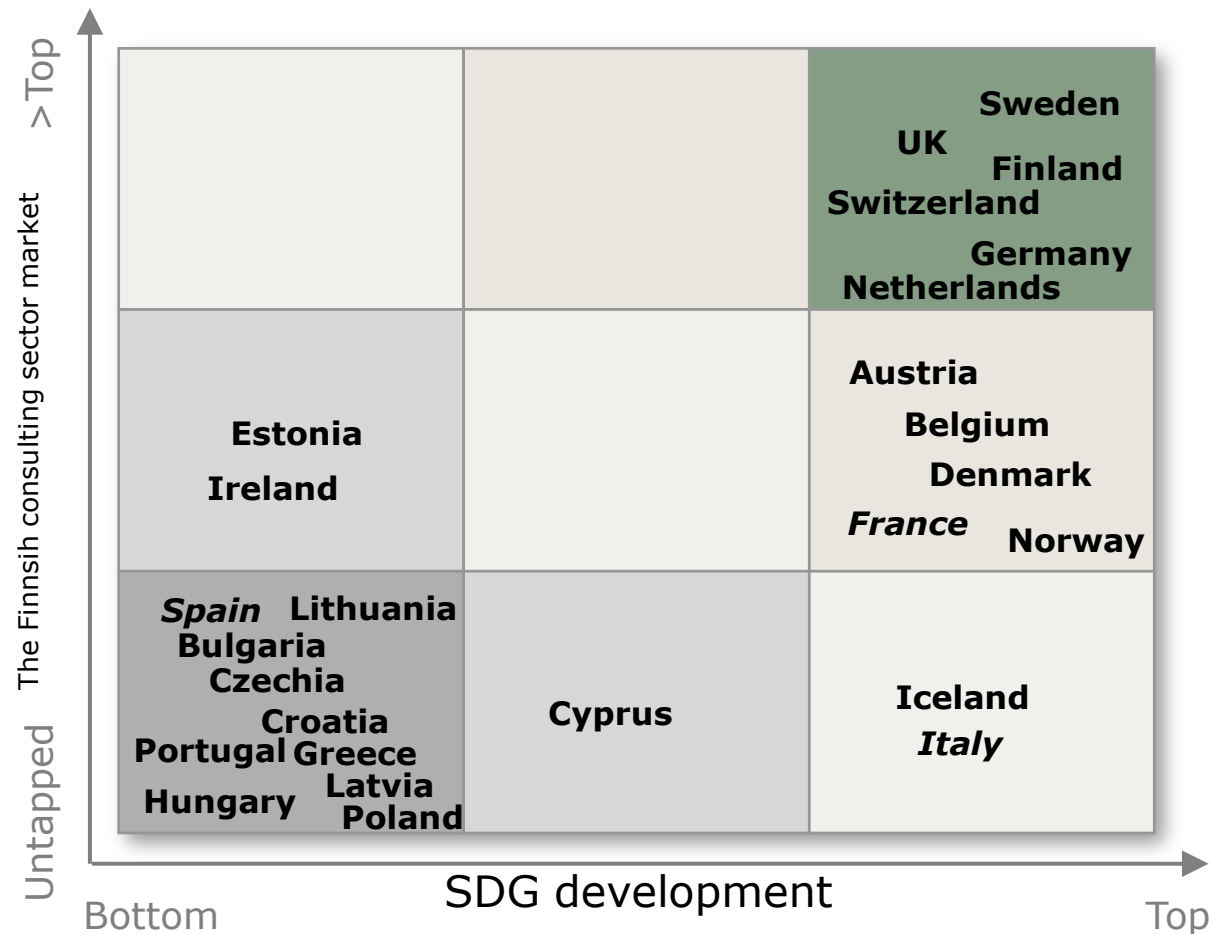
"GHG INTENSITY STRIPES" FOR TOP FINNISH CONSULTING SECTOR MARKETS

GHG Intensity Avg 78  102



Source: Eurostat

The country spread in SDGs and as the Finnish consulting sector markets leads to conclusions...



- **Top square:**
Very dense and logical?
- **Its opposite:**
Dense, with surprises, too.
- **To develop:**
Rising opportunities

... "The Finnish consulting sector does well where SGD development is good" and other conclusions from just the data and nothing else

CONCLUSIONS

1) If it is a Finnish consulting sector top market, it has top SGD development.

Meaning: strict sustainability attitudes and regulations are an advantage for the Finnish consulting sector

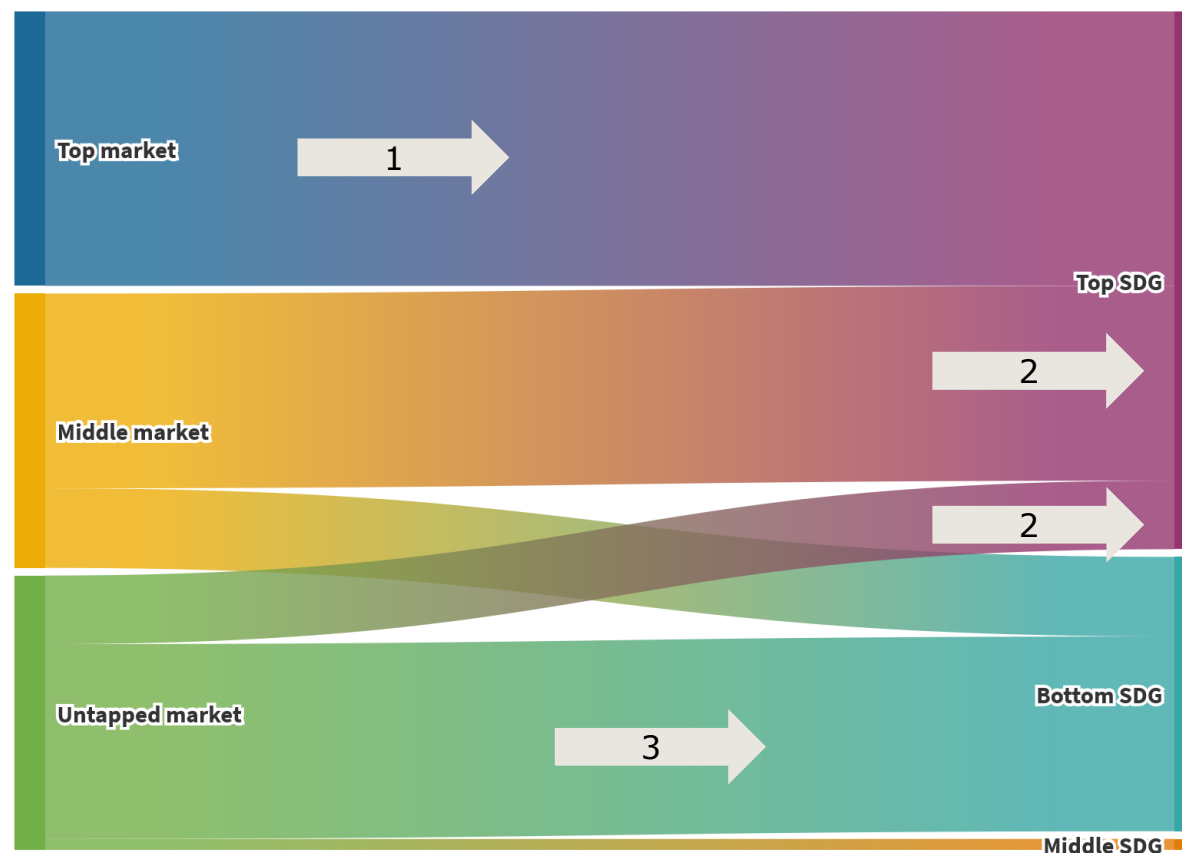
2) All top SGD countries have not been successfully penetrated by the Finnish consulting sector

Meaning: some top SGD countries could be picked for special attention.

3) Most of the untapped markets have poorer SGD development

Meaning: what is the best way to bring the Finnish consulting industry to boost less developed SGD countries?

RELATIONSHIP BETWEEN THE FINNISH CONSULTING SECTOR MARKETS AND SGD DEVELOPMENT



Overall development in Europe is at two speeds – circular economy rises from the numbers for Top SDG's; the move to renewable is delayed at the bottom

CONCLUSIONS

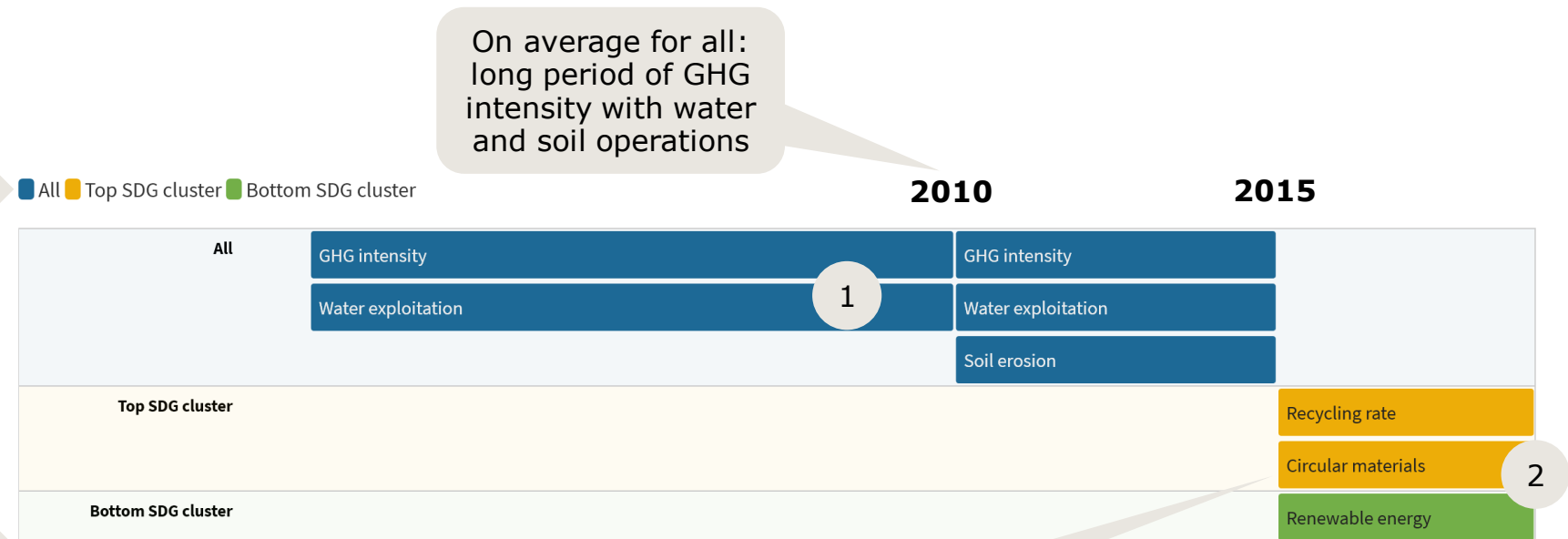
1) As an average, 2010-2015 was mostly energy efficiency, water and soil improvement

Meaning: the mainstream of consulting was very dominant – but the Finnish consulting knowhow evolved and was used

2) Since 2015, the different development stages seem very clear, with circular economy vs. renewables

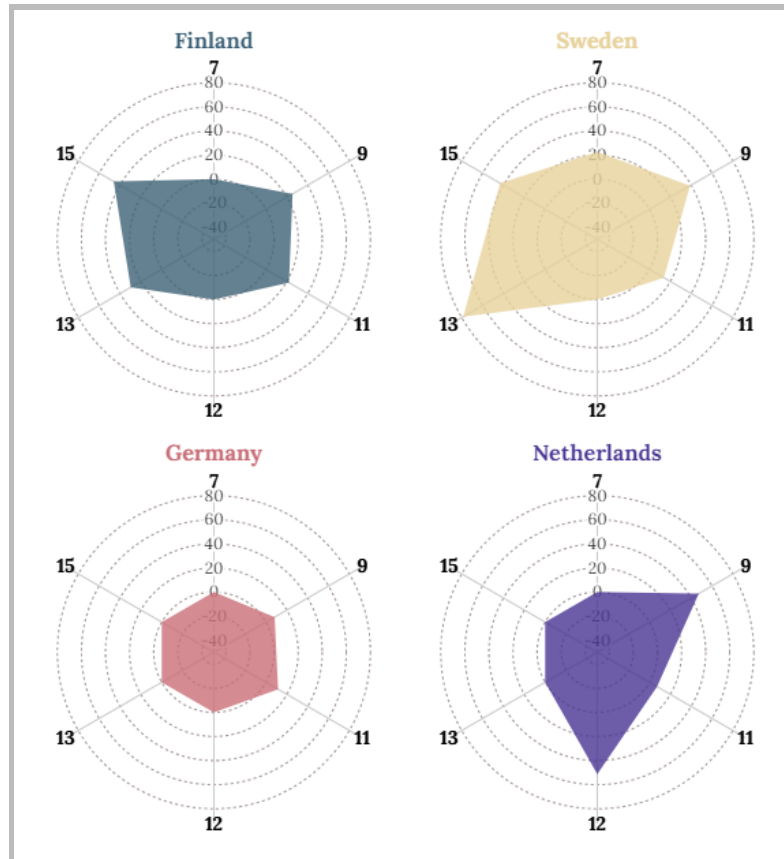
Meaning: The advanced markets' moves are circular, renewables are catching up – full spectrum markets

SDG DEVELOPMENT IN EUROPE



Profiles in SDGs of Finnish consulting focus countries

HOW IS THE SDG PERFORMANCE LIKE IN THE COUNTRIES WITH MOST FINNISH CONSULTING SECTOR EXPORTS COMPARED TO FINLAND?



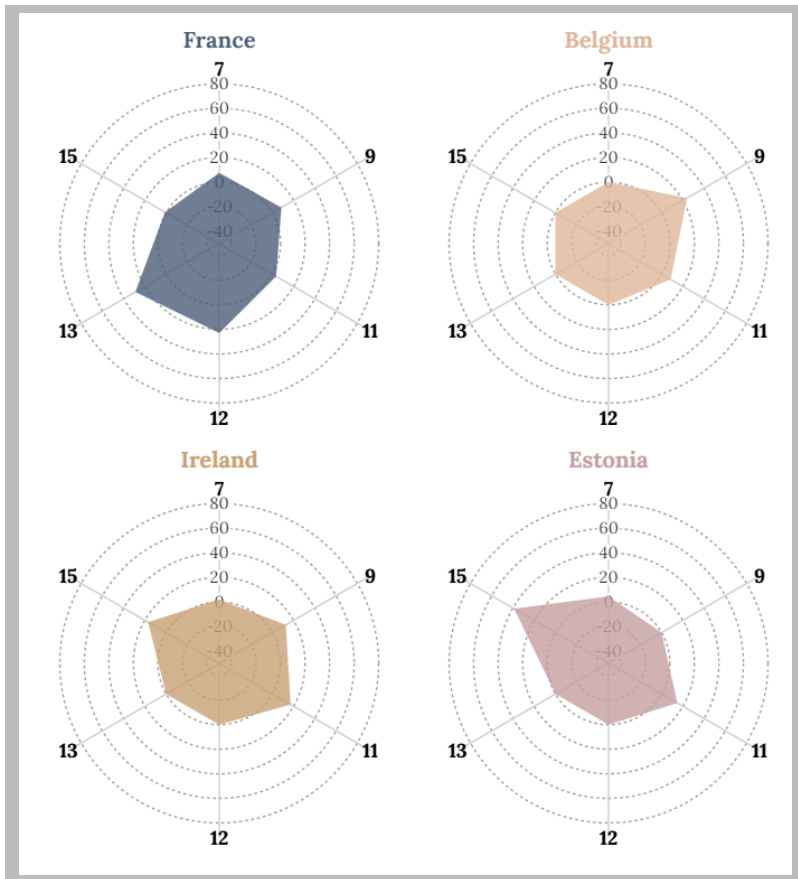
How to read the SDG spider charts?

- Higher the value on the axis, the better the country's performance
- The values on the axis reflect country's status in achieving the SDG compared to EU Average (100 being the highest, and -100 being the lowest)
- Numbers in the outer circle reflect the selected key SDGs where the Finnish consulting sector companies operate the most

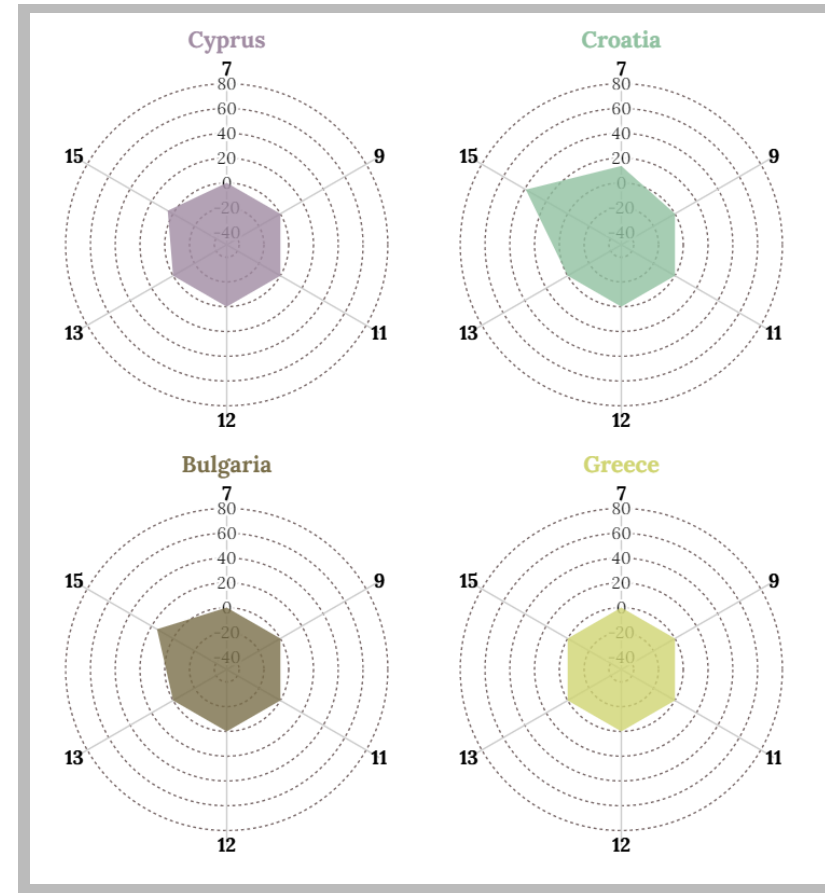


SDG profiles of countries where Finland less active

HOW IS THE SDG PERFORMANCE IN MID-SIZED MARKETS OF FINNISH CONSULTING EXPORTS COMPARED TO FINLAND?

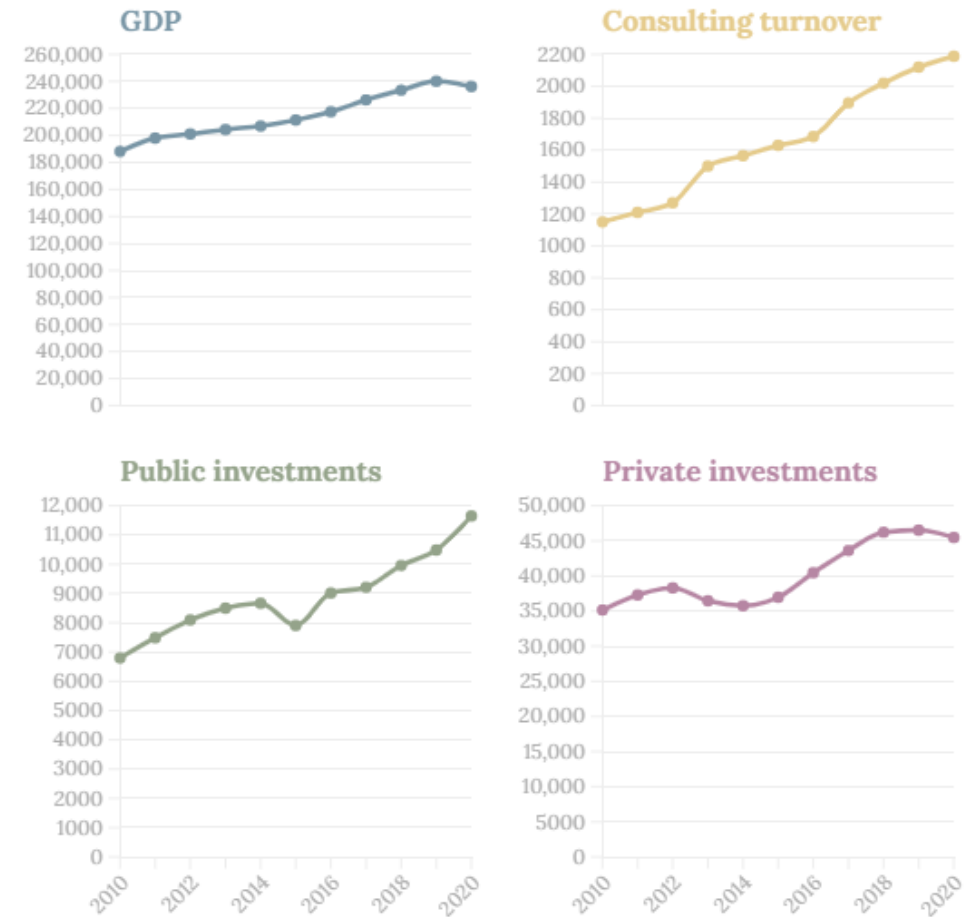


HOW IS THE SDG PERFORMANCE IN COUNTRIES OUTSIDE FINNISH CONSULTING SECTOR EXPORT FOCUS COMPARED TO FINLAND?



Traditionally consulting is seen to depend only on macroeconomic indicators.
However: what is the relationship to SDG performance?

- N.B. We have to be careful with causality. Correlation is not causality, parallel development may rather be two factors reinforcing each other than one leading the other



WHAT BEST MATCHES GROWTH

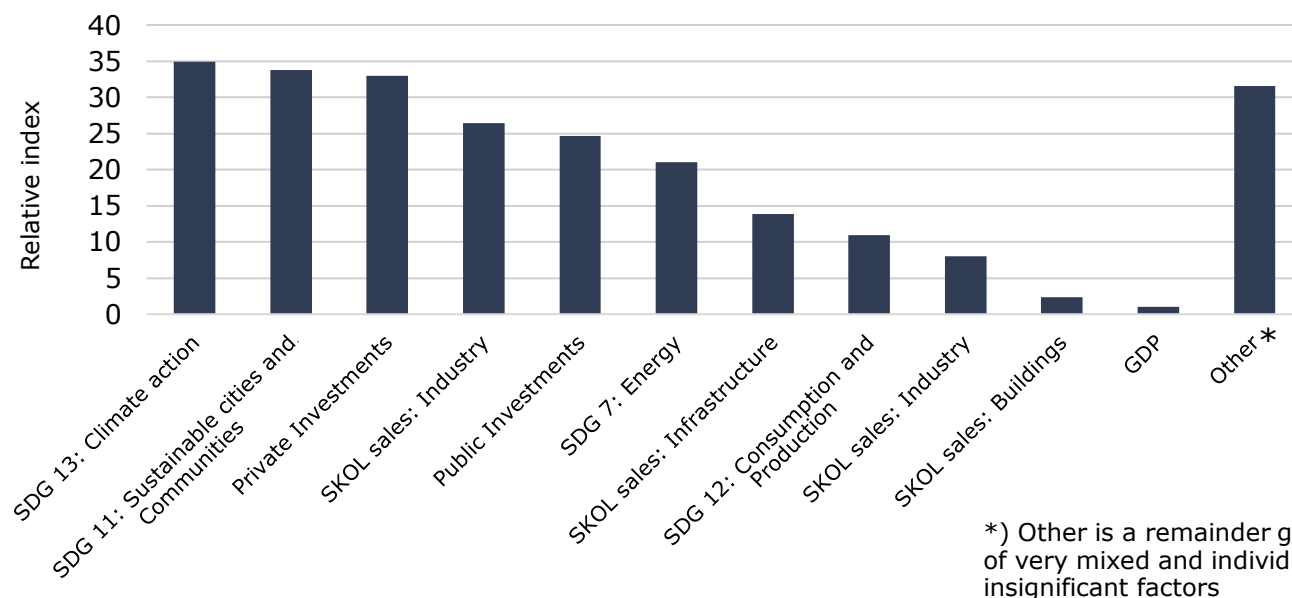
When forecasting Finnish consulting turnover development, climate, cities and investments actually best explain growth



Consulting sales: what explains growth?

We made an AI forecast model of growth and a group of different factors

IMPORTANCE OF DIFFERENT VARIABLES AND GDP AS A REFERENCE LEVEL



Climate and sustainable cities drive the Finnish consulting sector

The best forecasting elements: climate action and sustainable cities development

Investments come next

Yes, consulting companies' turnover is still very dependent on investment projects

GDP has little direct explaining power

As opposed to "old-school GDP forecasting", GDP by itself has very little explanatory power on the Finnish consulting sector growth

Why tightening climate policy actually creates opportunities for the Finnish consulting sector companies

THE LOGIC

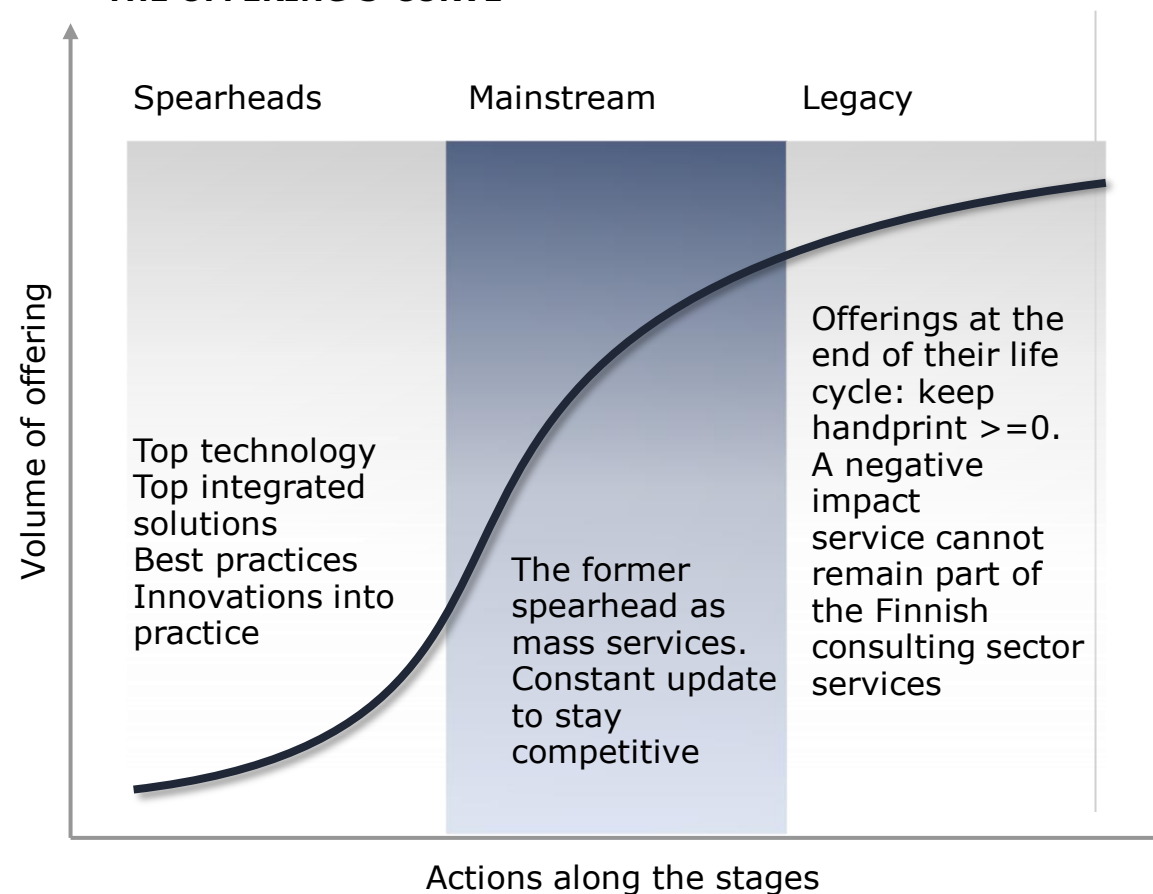


//

NEVER GET SELF-SATISFIED

A permanent imbalance is needed – the Finnish consulting sector as a whole must be on top in changes in sustainability to even keep their position, let alone grow. The sector has to have enough offerings that lean ahead of the mainstream to succeed.

THE OFFERING S-CURVE



A coiled white cable with a connector, symbolizing information flow.

The value and lifecycle of information

DATA

Data value in an industrial project

LOWER RANGE

10 000 files of drawings



UPPER RANGE

100 000 files of drawings



Value of consulting encapsulated
in files:

0.0004 EUR/bit

or

400 EUR/Megabit

Data mobile transfer of the example project **final results**: 4G and towards pure 5G

2017 IN FINLAND

2017 mobile data transfer in Finland (no 5G)

0.3 kWh/GB

1 iteration of the final files in the example project sent over mobile then

0.75 kWh

with emissions

0.07 kg CO₂ eqv.

PURE 5G IN 2025

Pure 5G transfer in 2025

0.03 kWh/GB

1 iteration of the final files in the example project sent over mobile then

0.075 kWh

with emissions

0.004 kg CO₂ eqv.

The data multiplier effect

The final data encapsulating the results is **only part of all data** generated during a project.

How much more data is generated than the final results? Based on sampling of different types of projects, a **multiplier of 100** seems realistic. That is, during a project all the intermediate versions and different data files altogether accumulate to about 100 times the size of the final deliverable.

DATA

Data mobile transfer to cloud of **all generated data** during the same example project: 4G and towards pure 5G

2017 IN FINLAND

2017 mobile data transfer in Finland (no 5G)

0.3 kWh/GB

1 iteration of all files in the same example project sent over mobile then

0.75 kWh * 100

with emissions

7.2 kg CO₂ eqv.

PURE 5G IN 2025

Pure 5G transfer in 2025

0.03 kWh/GB

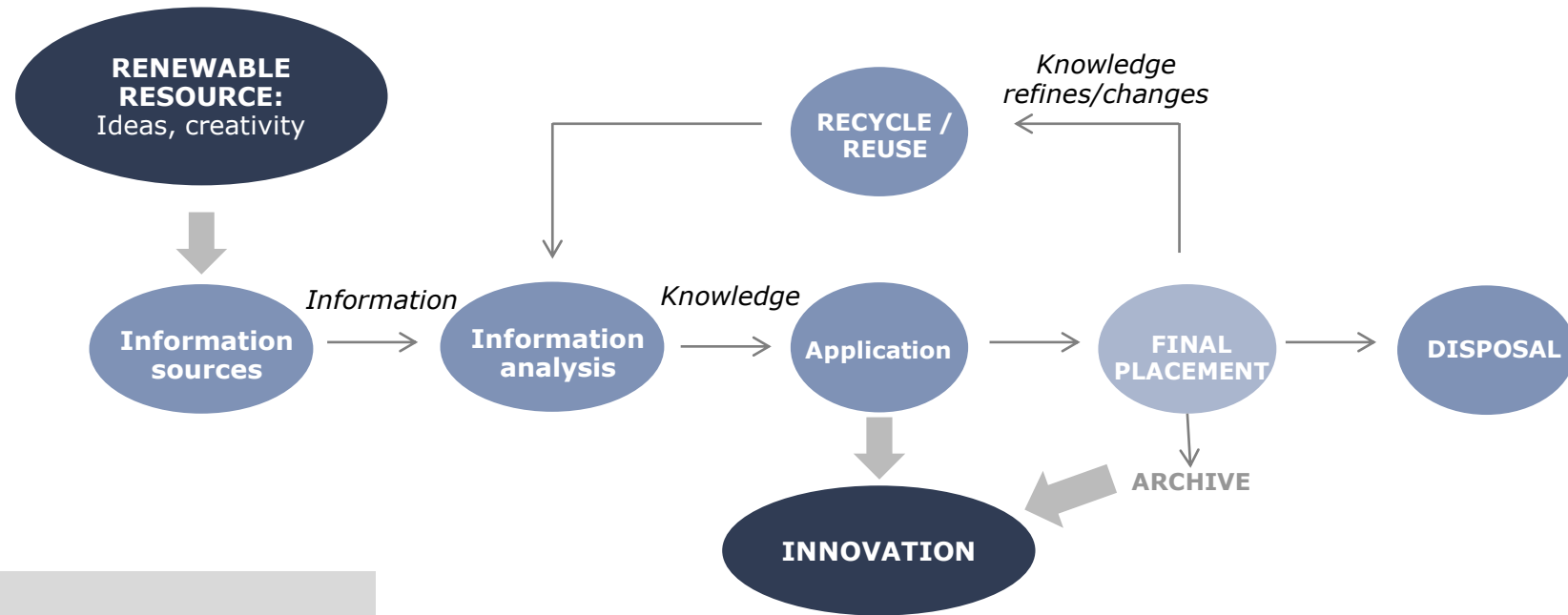
1 iteration of all files in the same example project sent over mobile then

0.075 kWh * 100

with emissions

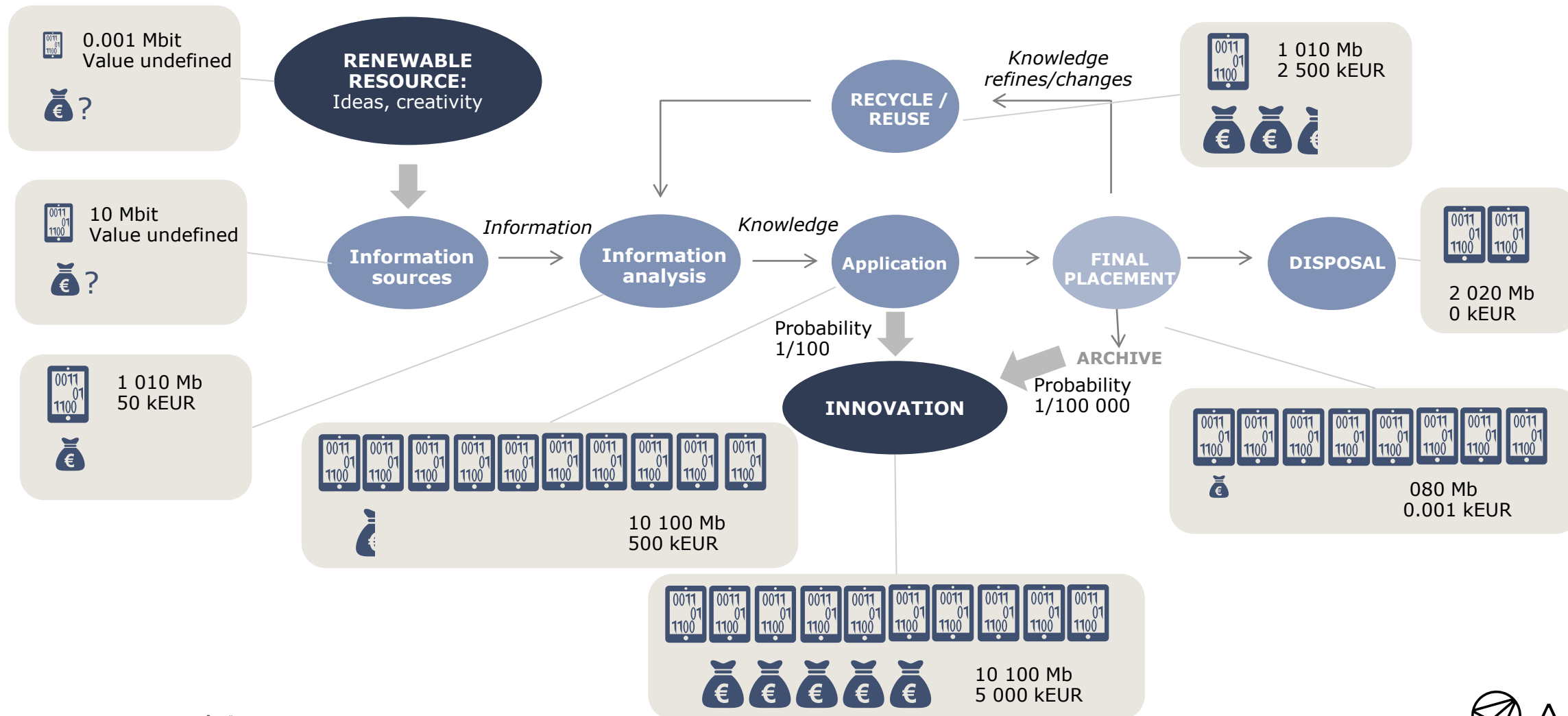
0.40 kg CO₂ eqv.

Circular economy of information



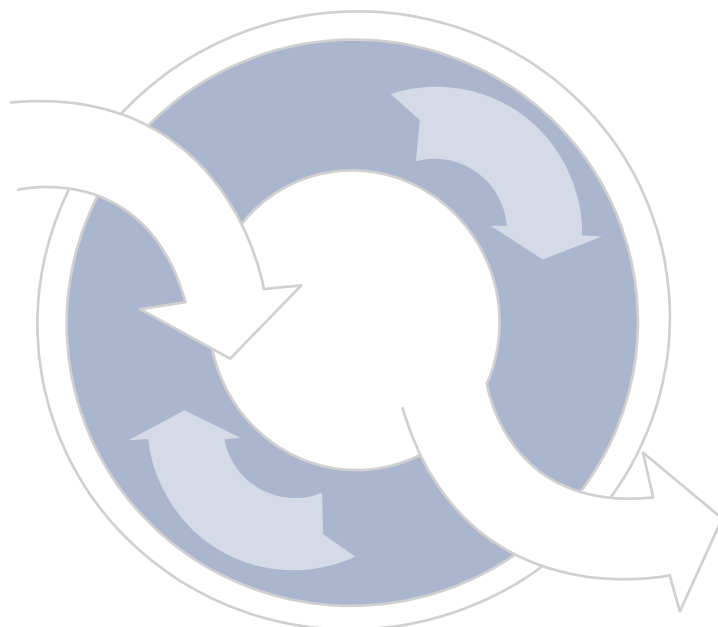
Concept created by Pöyry and the authors also present in this current study and published in 2009. [Link](#)

Value of information grows exponentially as it is refined by experts



Value added in one loop in circular economy of information – example

1 Gb
entering the
process,
value
50 kEUR



After 1 loop

11 Gb,
3 MEUR

Proportion:

In:
50 EUR/Mb

After 1 loop:
270 EUR/Mb

**Value per information
fivefold after 1 loop**

"On the move" - Circular information economy in consulting: sustainable value added

THE BASIS

1) Circular information economy as cornerstone for consulting

Meaning: information, from idea through analysis, application, circularity with value added end final disposal, is at the core of all consulting

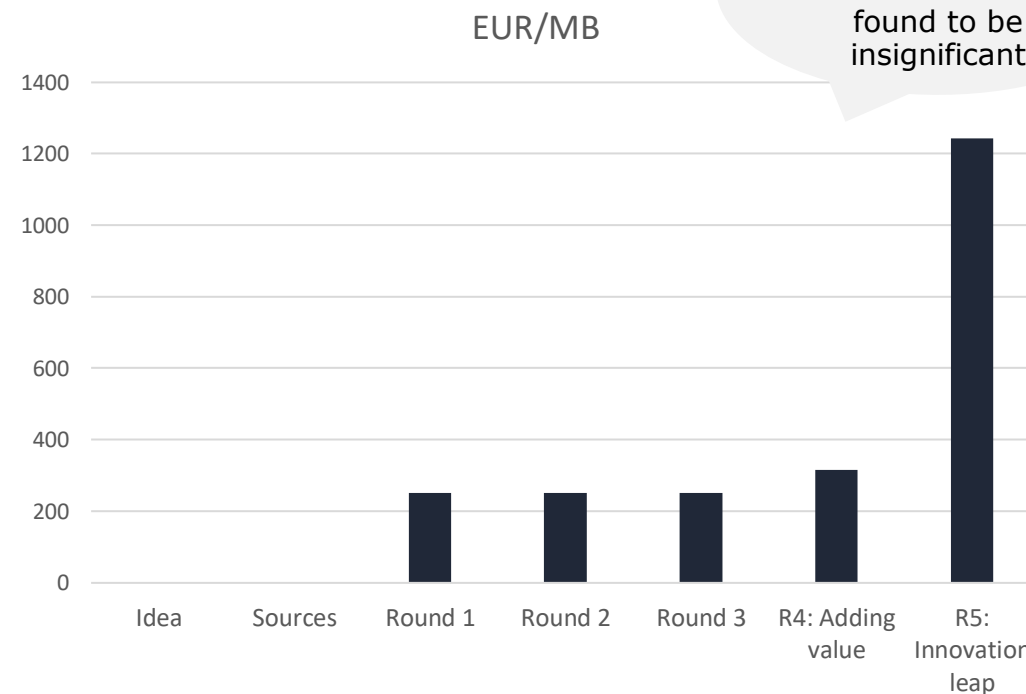
2) Information moves: the greater efficiency emission/bit is counteracted by increasing information

Meaning: we are more efficient transferring information, but there is more of it.

3) Information should gain in value in circularity: occasional innovation loops ("quantum leaps") occur

Meaning: we get the most out of what was created in circularity – and more value per bit is created in information loops

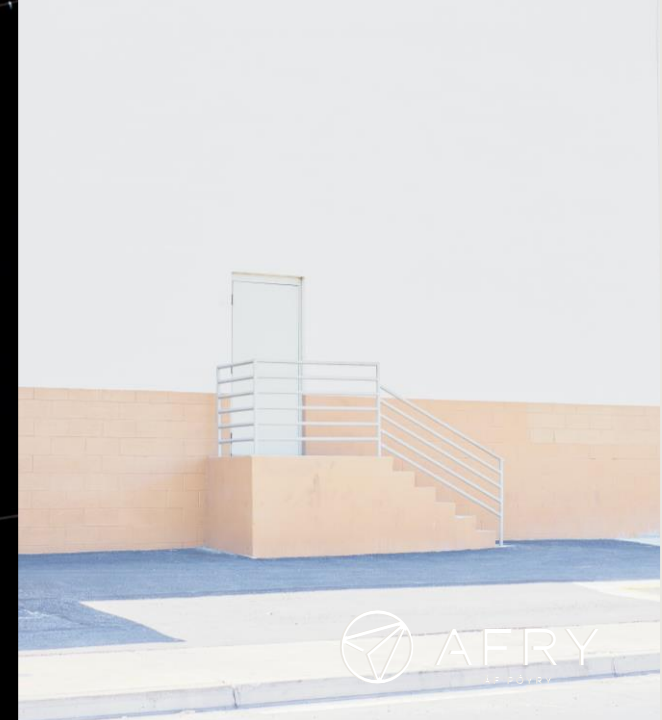
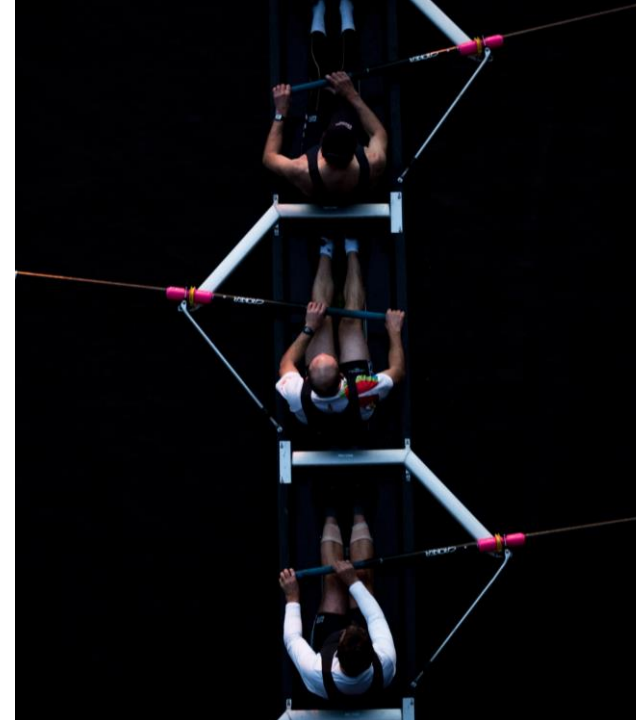
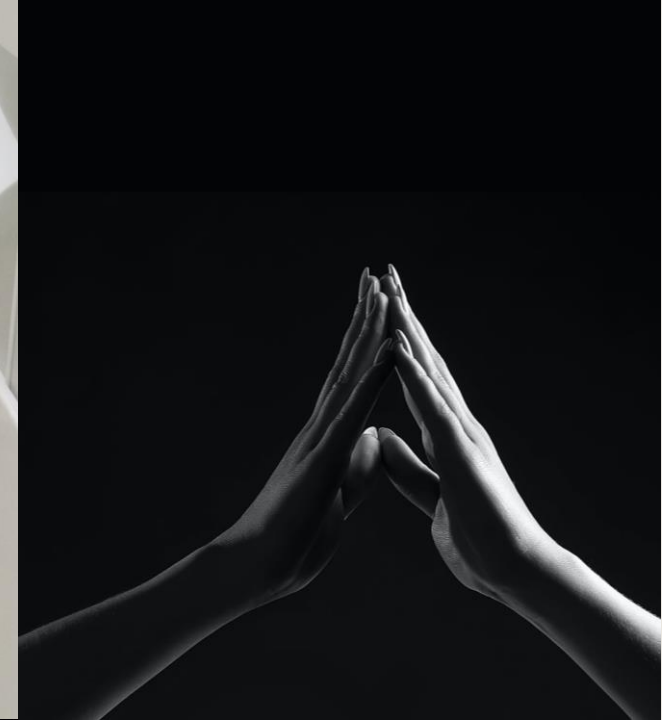
THE INCREASE IN VALUE ADDED




Rounds refer to the information rounds in the circular information loop (one loop = analysis, application, recycling)

Content

1. The key messages
2. The social value created by the consulting sector
3. The low carbon roadmap and handprint of the consulting sector
 - 3.1 Footprint
 - 3.2 Handprint
4. Sustainable value creation of the consulting sector now and in the future





3. The low carbon roadmap and handprint of the consulting sector

APPROACH DESCRIPTION

How do consulting and design services create a handprint impact with a footprint?

EARLY HUMANS TO CONSULTANTS (PROGRESS, OR NOT)

a) Ancient human “handprint art” on cave walls

Sustainable value added = presumably hunting luck and wellbeing. There was an idea on how to generate this through handprint art. This produced a footprint, too – on the floor, literally, but also as an impact of effort to produce the handprint art.



b) Consulting producing handprint with a footprint, in Finland and globally

Sustainable value added = defined earlier. All actions to reduce CO2 start with an idea. Through many stages viewed as a consulting project a handprint (CO2 savings, other impacts) is created. This produces a footprint for consulting.



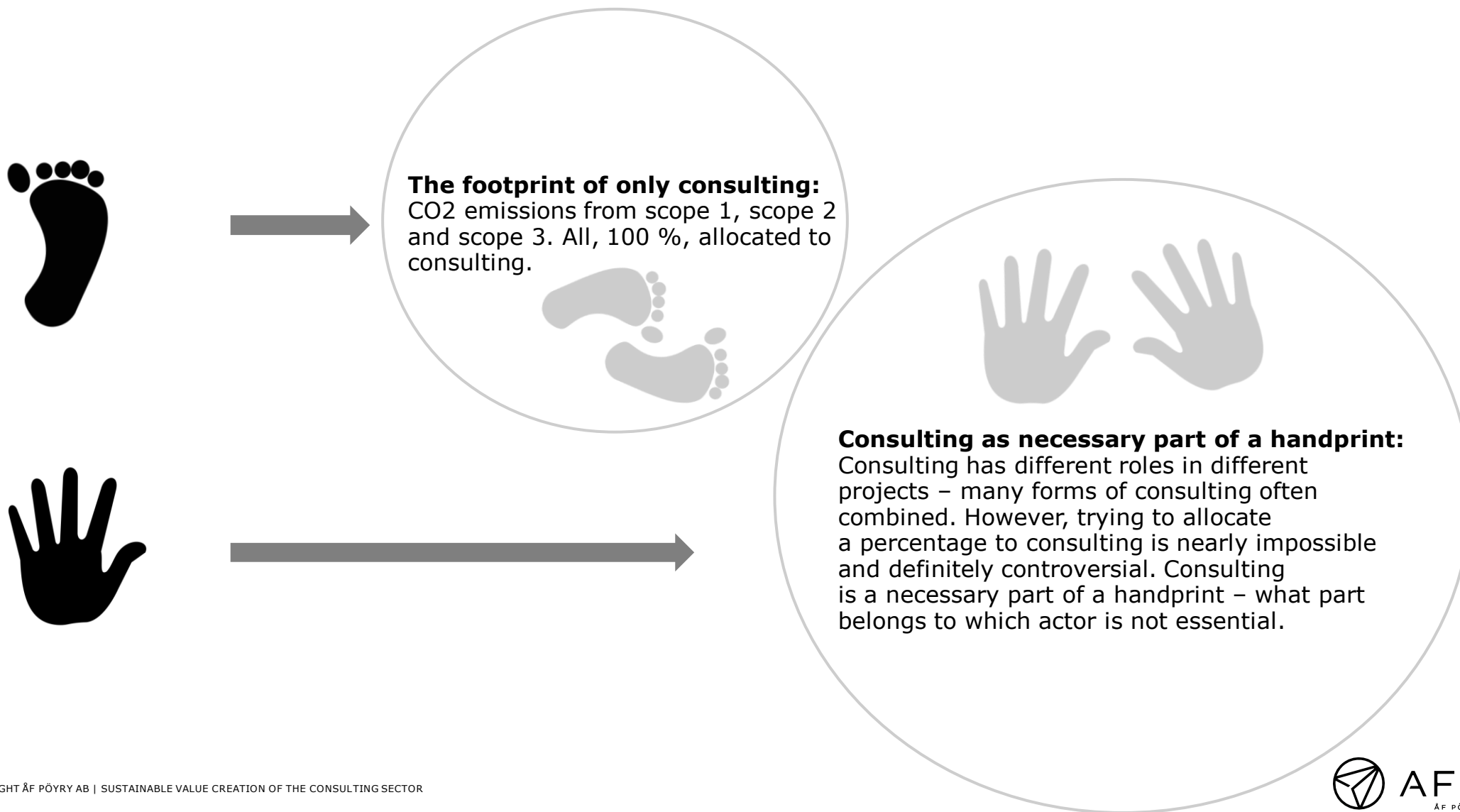
AN IMPORTANT CONNECTION FROM THE EARLY BEGINNING OF HANDPRINT ART



Nothing new under the sun

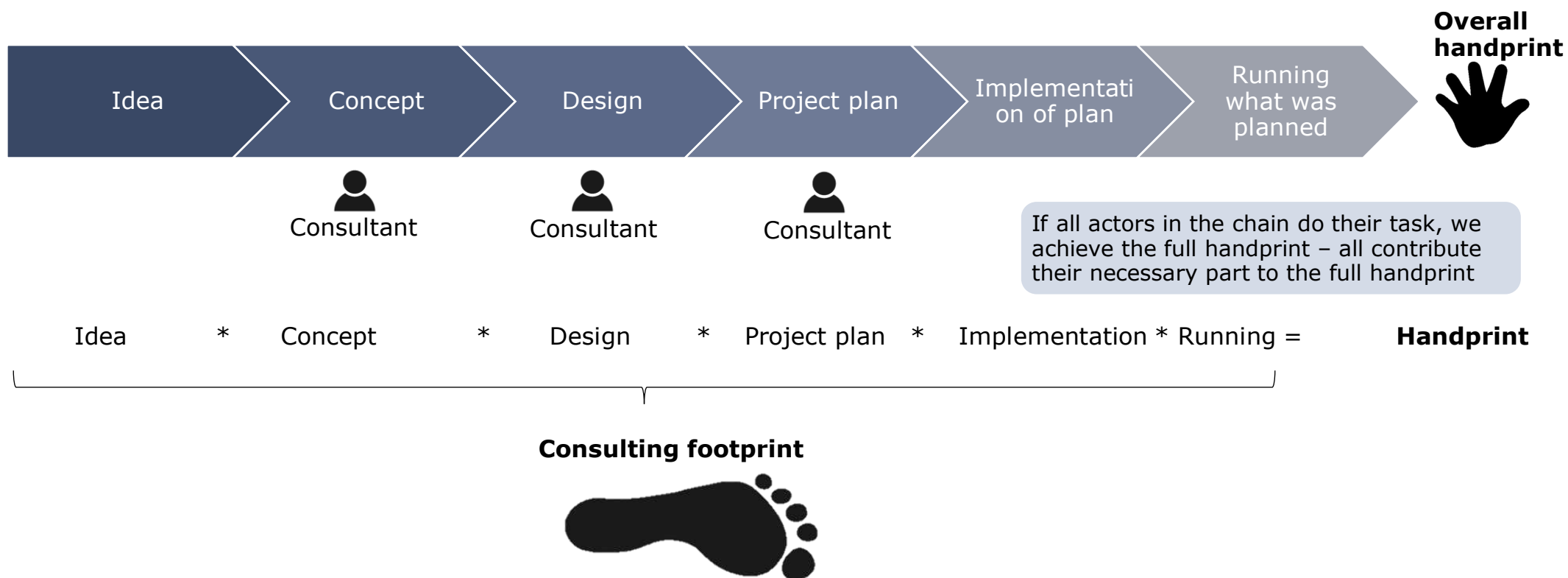
Fundamentally, creating sustainable value added and wellness (**handprint**) with an effort (**footprint**), starting from **idea** and ending with implementation, with a “**guru**” involved in the process, is ancient. Consulting just has grown more complex.

How to in the simplest way think about consulting's footprint and handprint



"The consulting equation"

IF ANY OF THE CONSULTANT INPUTS ARE MISSING, THE TOTAL HANDPRINT IS 0. IN THIS CASE, ZERO IS NOT A GOOD THING.



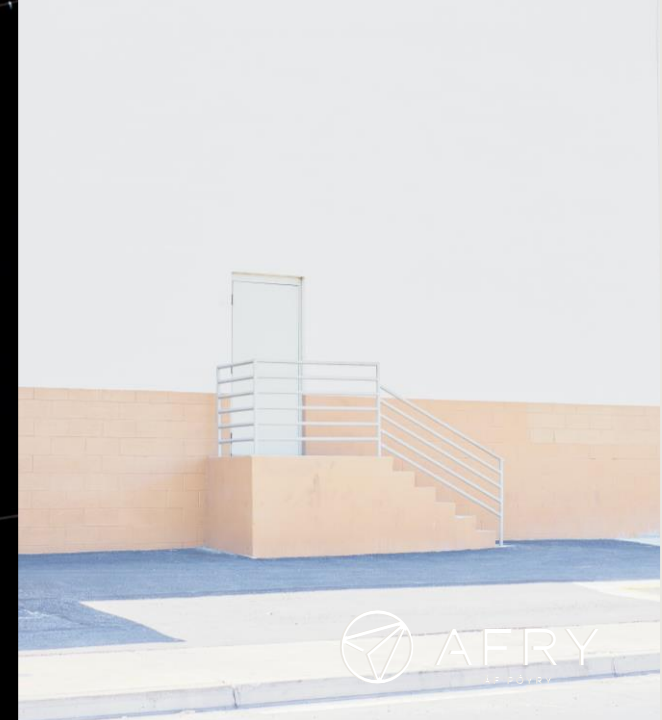
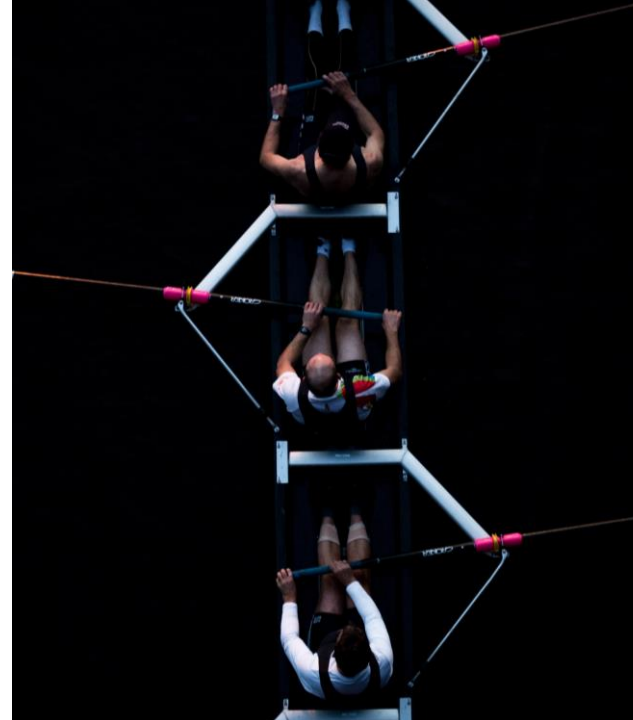
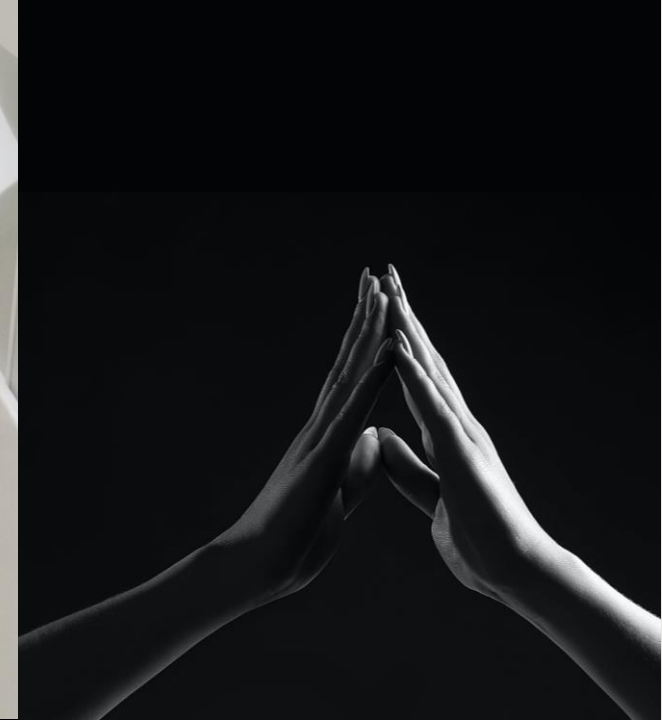
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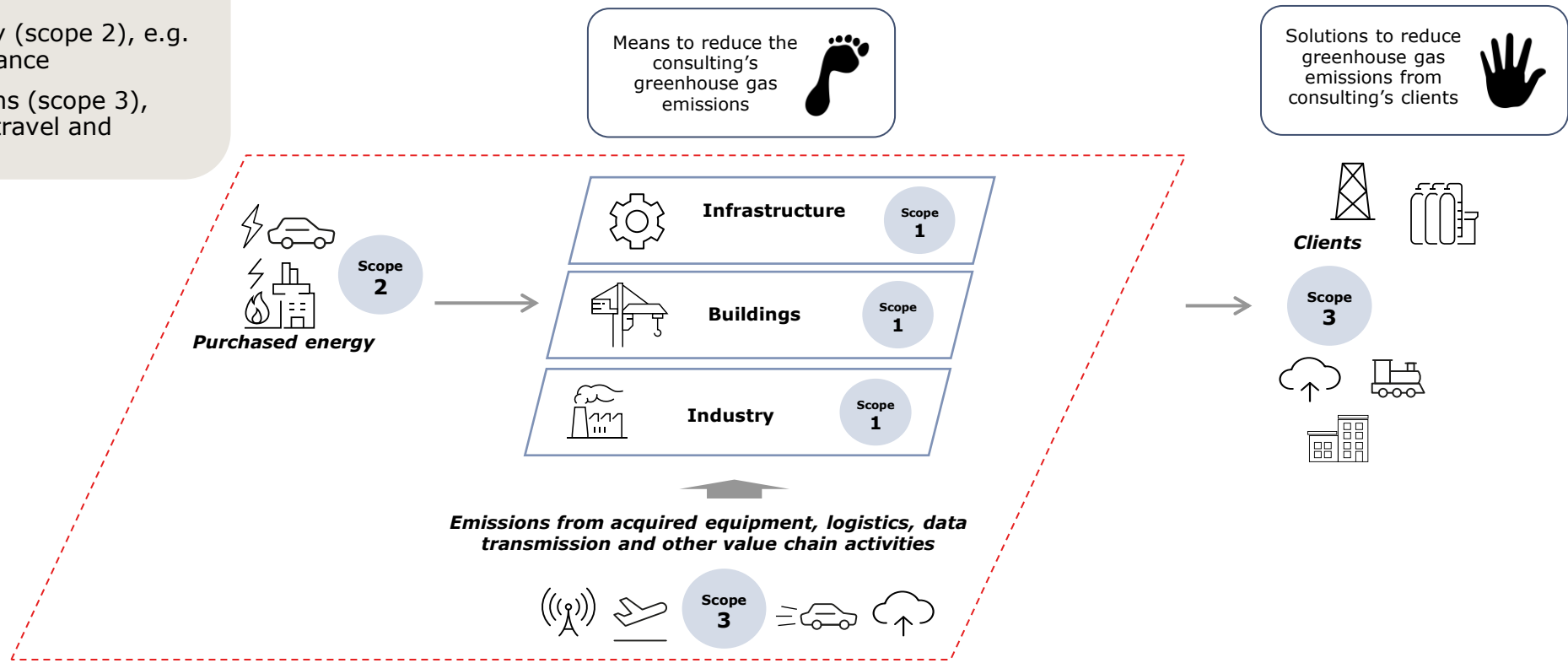
HOW LIGHT OR HEAVY IS OUR STEP?

3.1 Footprint

Carbon footprint for consulting and design services

Focus on

- Direct emissions (scope 1), e.g. company car use
- Purchased energy (scope 2), e.g. premise maintenance
- Indirect emissions (scope 3), mainly business travel and commuting



Scope 3 emissions are a major contributor to the Finnish consulting sector's total emissions

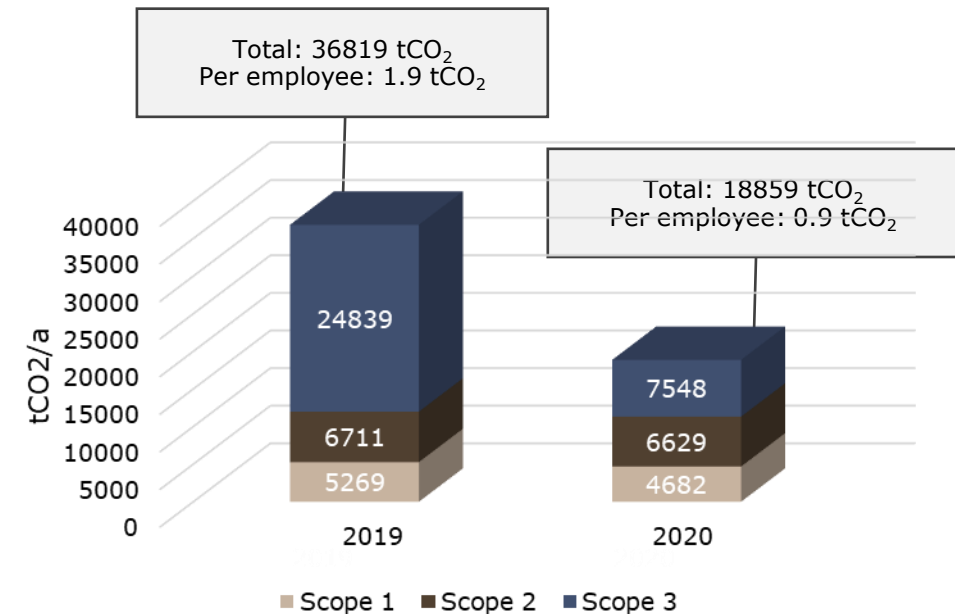
KEY FINDINGS SUGGEST...

- Consulting and design companies' major source of emissions is business travel (mainly scope 3), which was significantly reduced in 2020 due to the global COVID-19 pandemic
 - This induced a significant drop also in the emissions per employee
- Scope 1 and 2 emissions remained relatively stable during 2019 and 2020
- Scope 3 emissions are typically one of the hardest ones to reduce unless the companies along the value chain commit in reducing emissions, thus, the Finnish consulting sector ability to influence is limited but meaningful

→ **The 2019 carbon footprint is more representative to describe Finnish consulting companies' average emissions since it is not impacted by the COVID-19 pandemic**

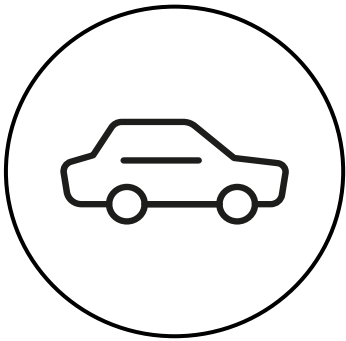
ESTIMATED FINNISH CONSULTING SECTOR* CO₂ EMISSIONS, THE YEAR 2019 GIVES A MORE REALISTIC REFERENCE WITHOUT COVID-19 IMPACTS

* The data covers SKOL members only

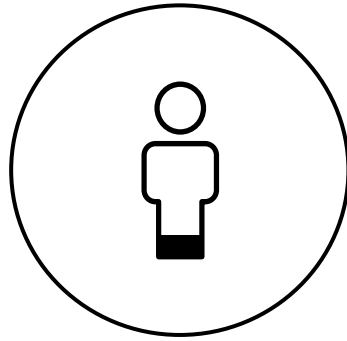


Scope 1 Direct emissions	Scope 2 Emissions from purchased energy	Scope 3 Other emissions / value chain emissions
<ul style="list-style-type: none"> – Sources controlled by the Finnish consulting companies themselves, e.g. business travel with company cars operated by employees, heat boilers if controlled by the company 	<ul style="list-style-type: none"> – Purchased and consumed electricity, heating and cooling purchased by the Finnish consulting companies 	<ul style="list-style-type: none"> – Purchased or rented goods and services, business travel, upstream transportation and distribution, waste, employee commuting, fixed assets investments, other (<i>reported sources may differ depending on a company</i>)

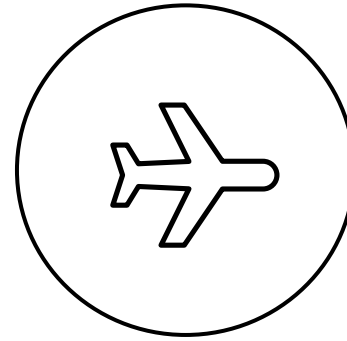
How much is 1 ton of CO₂?



Driving a passenger car
for half a year*



10% of annual carbon
footprint of Finnish citizen



Flying Helsinki – Málaga -
Helsinki



*Requires 50 trees to grow for
a year in order to capture it*

*Average km's per year with passenger car, gasoline: 9994km
Sources: Statista

The Finnish consulting sector's carbon footprint was heavily impacted by the global pandemic



SKOL annual contributions	Total emissions (tCO2)	SKOL sales (M€)	tCO2/M€ (Total emissions)	tCO2/M€ (Scopes 1 +2)	Emissions per employee	SKOL employees	€ Per employee
2019	36819	2120	17.4	5.7	1.9	19450	109000
2020	18859	2188	8.6	5.2	0.9	20117	108780

Source: Sitra (2019)

How heavy is the Finnish consulting sector impact?

**TOTAL EMISSIONS OF FINNISH
CONSULTING SECTOR***



37 ktCO₂/a

**FINNISH MUNICIPALITY WITH
A POPULATION OF 5800
(size of Mäntyharju municipality)**



37 ktCO₂/a

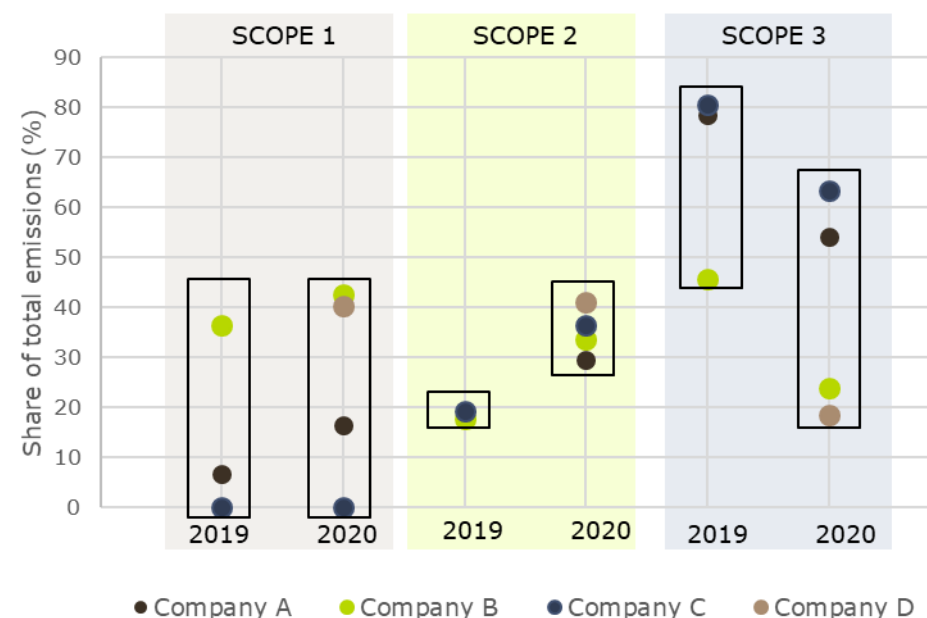
* The data covers SKOL members only

Most listed companies disclosed their emissions, however, assumingly their accounting methodologies vary

METHODOLOGY DESCRIPTION

- Estimated consulting companies' emissions are calculated using companies' self reported emissions in their annual reports
- Companies are not entitled to report their emissions but it is voluntary, and therefore the used data coverage is limited.
 - Company coverage used in emission estimation of total SKOL employees was 34% in 2019 and 50% in 2020
- Emission accounting methodologies may differ between companies
 - Figure in the right illustrates how the share of reported emissions per scope is rather varied between companies, which is not self-explanatory

SHARE OF REPORTED SCOPE (1-3) OF TOTAL EMISSIONS*



* The data covers SKOL members only

Emissions reported only in 2020

What is included in scope 3 emissions? Accounting methodologies may vary between companies, and thus, results shall be interpreted as indicative

QUESTION OF EMPLOYEE TRANSPORTATION – SCOPE 1 OR SCOPE 3?

Guidance of GHG Protocol

Scope 1

- Emissions from transportation in fuel vehicles owned or controlled by the reporting company

Scope 2

- Emissions from transportation in electric vehicles owned or controlled by the reporting company

Scope 3







- Business travel in vehicles owned or operated by third parties
- Employee commuting, transportation of employees to and from work
- Leased vehicles operated by the reporting company not included in scope 1 or scope 2

SCOPE 3 EMISSIONS' COVERAGE OF EXAMPLE CONSULTING COMPANIES

	Employee commuting (private cars)	Business travel (taxis, public transport, air travel, ferry)	Waste	Food	Fuel and energy related sources not included in scope 1 or 2	Investments	Transportation and distribution activity in the value chain	Other purchased or rented goods and services	Other
Company A	x	x							
Company B		x							x
Company C	x	x	x		x			x	
Company D	x	x	x	x	x	X	X	X	x

Companies have not necessarily separated the share of indicated emissions but announce that they are included in the scope of 'scope 3 emission sources'

Examples of how Finnish consulting companies can reduce their carbon footprint

	<p>Company cars with combustion engine</p> <p>Scope 1 </p>	<p>Purchased energy and electric cars</p> <p> Scope 2 </p>	<p>Acquired equipment, logistics, data transmission and other value chain activities</p> <p>  Scope 3 </p>
LOW HANGING FRUITS	<ul style="list-style-type: none"> - Switching company cars to electric cars 	<ul style="list-style-type: none"> - Selecting a clean/renewable energy plan - Reducing energy use with electricity-efficient and smart equipment and practices - Incentives for office premises and activities, e.g. LEED Certification, WWF Green Office - Changing lighting to less-energy consuming options - Adjusting office needs with hybrid working 	<ul style="list-style-type: none"> - Deploying digital tools to replace part of travelling - Selecting cloud service and mobile provider that uses clean electricity - Reducing food waste and promoting of plant-based options - Applying green criteria for procurement of goods and services - Encouraging carpooling and cycling in employee commuting - Minimising waste and enhancing recycling
ADVANCED	<p><i>Sometimes an improvement in scope 1 is actually transferred to scope 2 or 3</i></p>	<ul style="list-style-type: none"> - Installing solar panels on office roof area - Energy and environmental design of office premises and green retrofits (incl. insulation, lighting, HVAC) 	<ul style="list-style-type: none"> - Preferring less GHG-intensive means of travelling - Purchasing second hand or sustainably sourced office furniture - Increase employee engagement to make them feel connected to reducing company carbon footprint

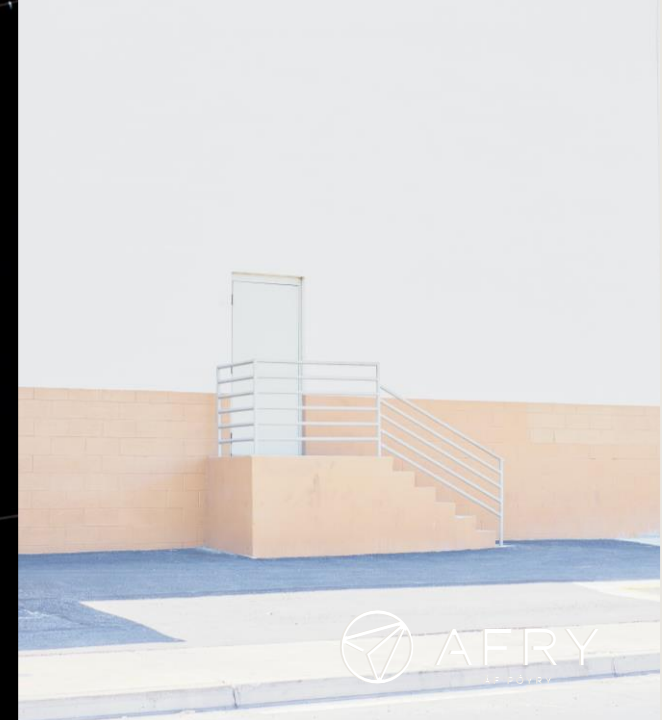
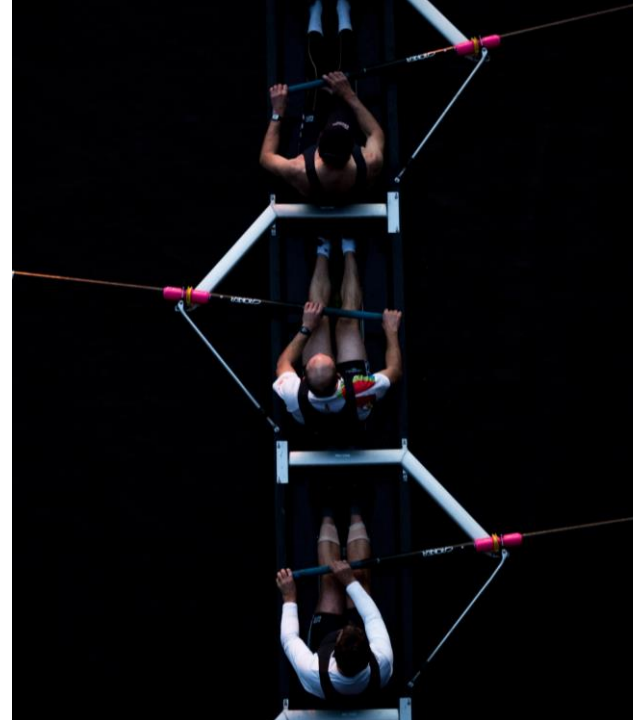
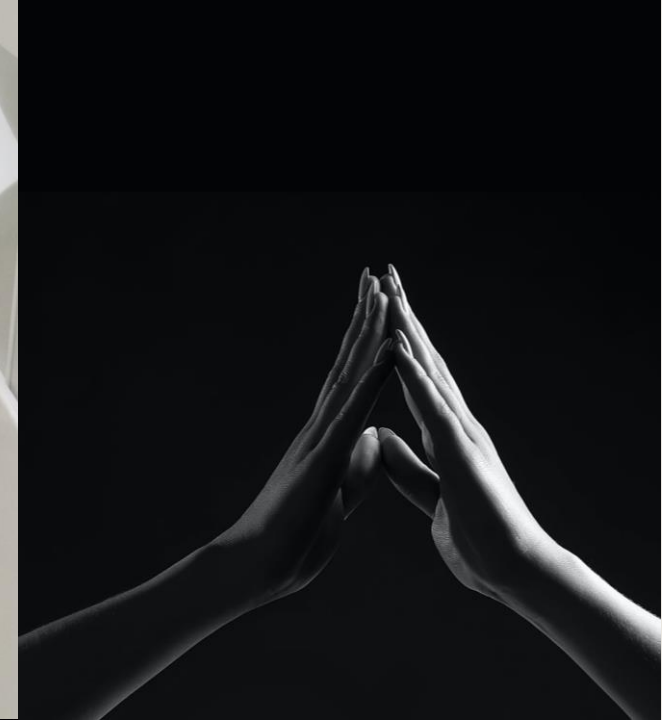
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3.2 Handprint





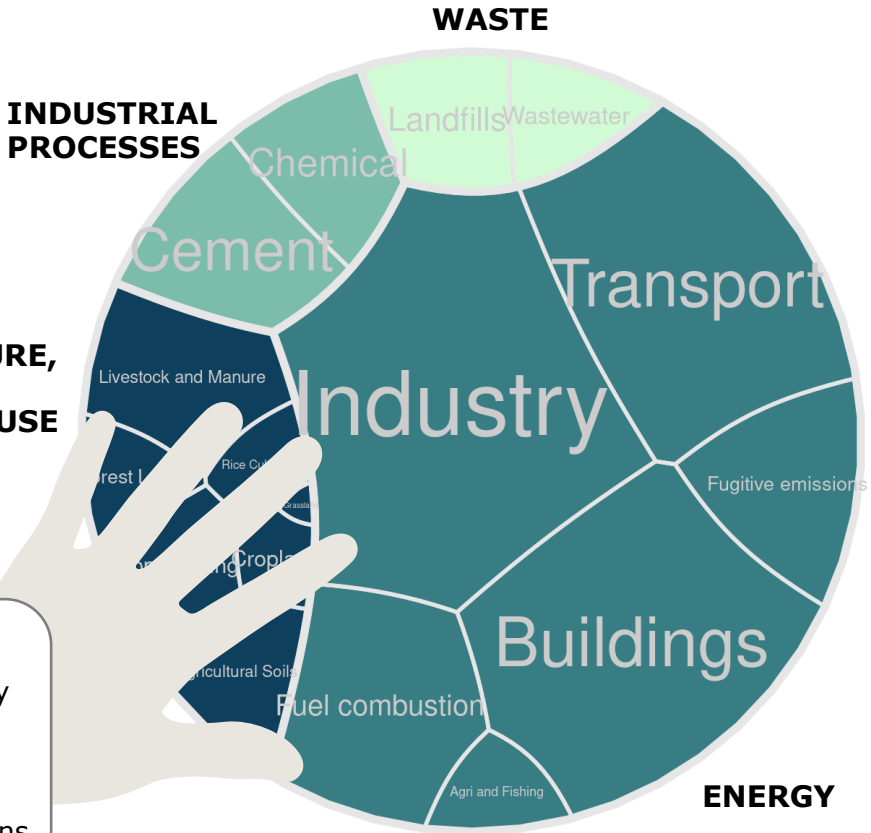
Handprint methodology

Getting a representative set

Getting a grip on emissions: Potential to reduce clients' GHG impacts demonstrated with cases

IMPACT OF FINNISH CONSULTING COMPANIES
Finnish consulting companies operate in emission-intensive sectors, and thereby, are solving the most crucial sustainability problems

AGRICULTURE, FORESTRY AND LAND USE



- Palette of solutions, e.g.**
- Improving energy and material efficiency
 - Preparing for risks
 - Enabling smart society and circularity
 - Sustainable design and lifetime extensions

CASE STUDIES COVER THE FINNISH CONSULTING SECTOR OPERATIONS AND IMPACTS

- | | |
|--|-------------------------------------|
| Improving energy efficiency of existing facility | Digital twin for a production plant |
| Preparation for the risk of cyber attack on electricity grid | Material-efficient construction |
| Smart city water system | Urban planning for smart city |

Note
GHG impact is quantified in the cases, but other sustainability impacts may not be compromised.

Source: Our world in data/WRI (2020)

The Yes and No of interpreting the handprint

YES, SAY IT

BE AN IMPORTANT PART OF A LARGE HANDPRINT
where consulting is an absolutely necessary part

TELL REPRESENTATIVE CASES which provide a suitable coverage of the Finnish consulting sector's current and coming offerings

SCALE UP THE CASES FOR AN ESTIMATE OF THE HANDPRINT THE FINNISH CONSULTING SECTOR IS AN INTEGRAL PART OF by assuming a certain proportion of spearheads, mainstream and "legacy" cases (as to handprint) and using the cases to provide an estimate that fits the projected Finnish consulting sector turnover.

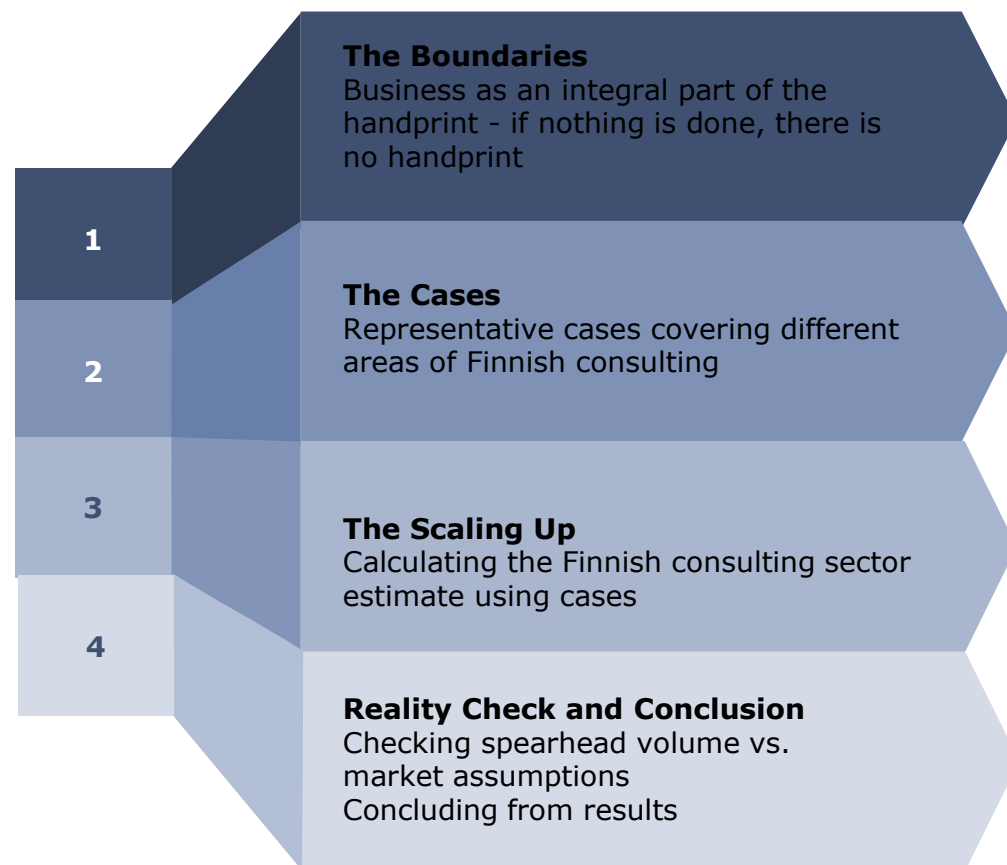
NO, AVOID IT

NO: THE HANDPRINT DOES NOT 100 % BELONG TO CONSULTING.
Consulting has an absolutely necessary role in the handprint; without consulting the handprint cannot happen – but all is definitely not consulting.

NO: The cases are **NOT A FULL CATALOGUE OF ALL CONSULTING DONE** and cannot be. Just imagine 10 000 different projects in different conditions with different impacts. That is not doable.

NO: DON'T TAKE THE HANDPRINT ESTIMATE AS A PRECISE "TRUTH". It is a realistic estimate giving a size for where the Finnish consulting sector is involved. It also helps in guiding thinking of where the Finnish consulting sector should be headed.

The handprint logic: how to estimate how much the Finnish consulting sector is part of accomplishing in handprints



The main boundary:

- turnover (numbers now/forecast) for the Finnish consulting sector divided into the three categories of consulting sector work
- the handprint is scaled up from cases to match this turnover

Output:

- showing that the Finnish consulting sector services are being covered by the cases (representativity)
- CO2 reduction and consulting cost/unit of consulting (study, project) – key calculation numbers for handprint
- abatement cost
- proportion of Finnish consulting sector categories (industry, infra, building) in each case

Scaling needs:

- average reduction/consulting cost/category, weighted calculation from case percentages
- division of studies/projects assumption (spearheads/mainstream/laggards)
- average reduction/consulting cost by project type
- scaling up to full turnover by multiplying project type volume with reduction/cost

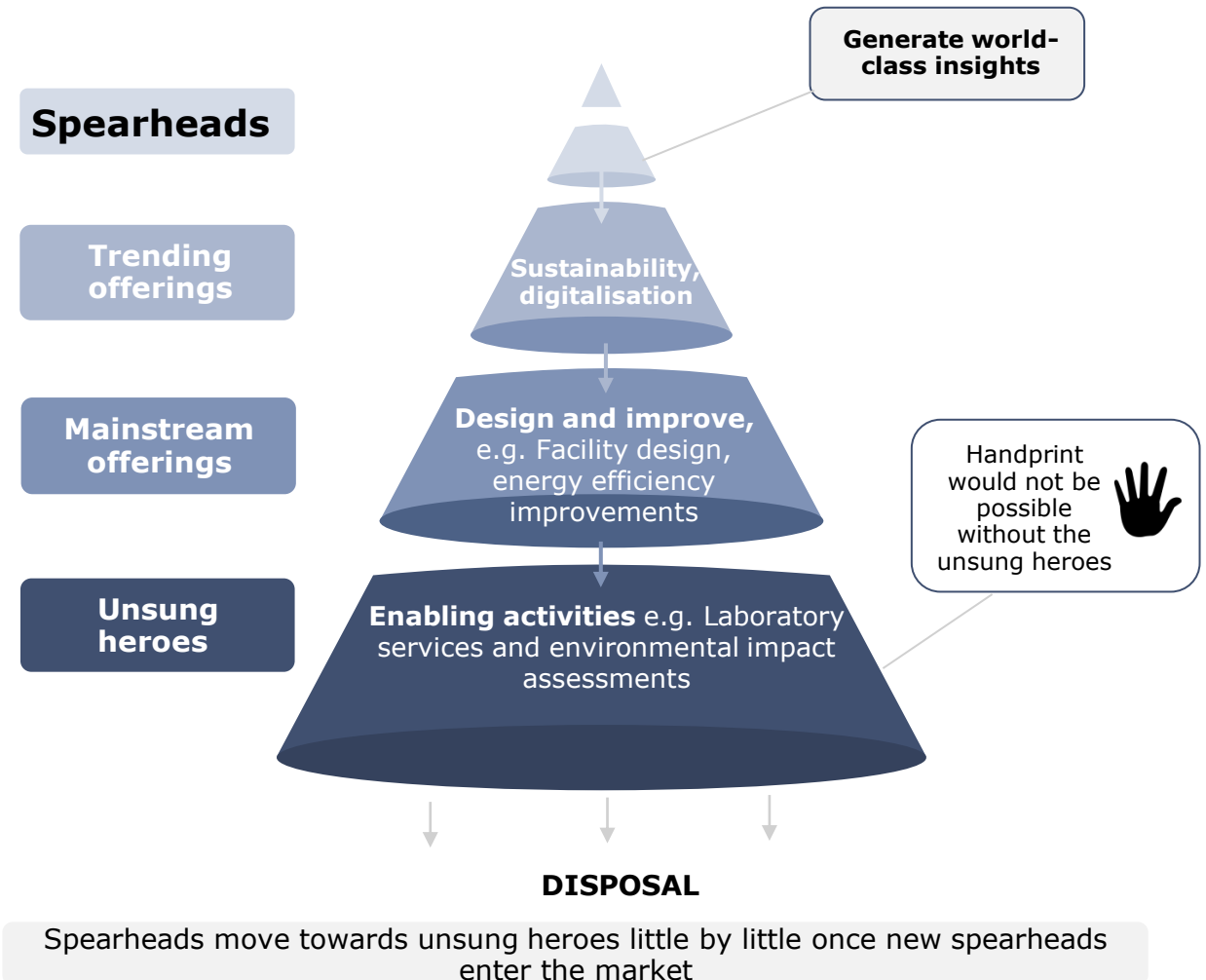
Final check and conclusion

- assuming sales projections as reasonable: does it make sense to assume the resulting volume of spearheads sold? Is the global market big enough for reasonable market entry being enough? Do we need to assume more spearheads?
- conclusions which of course depend on results

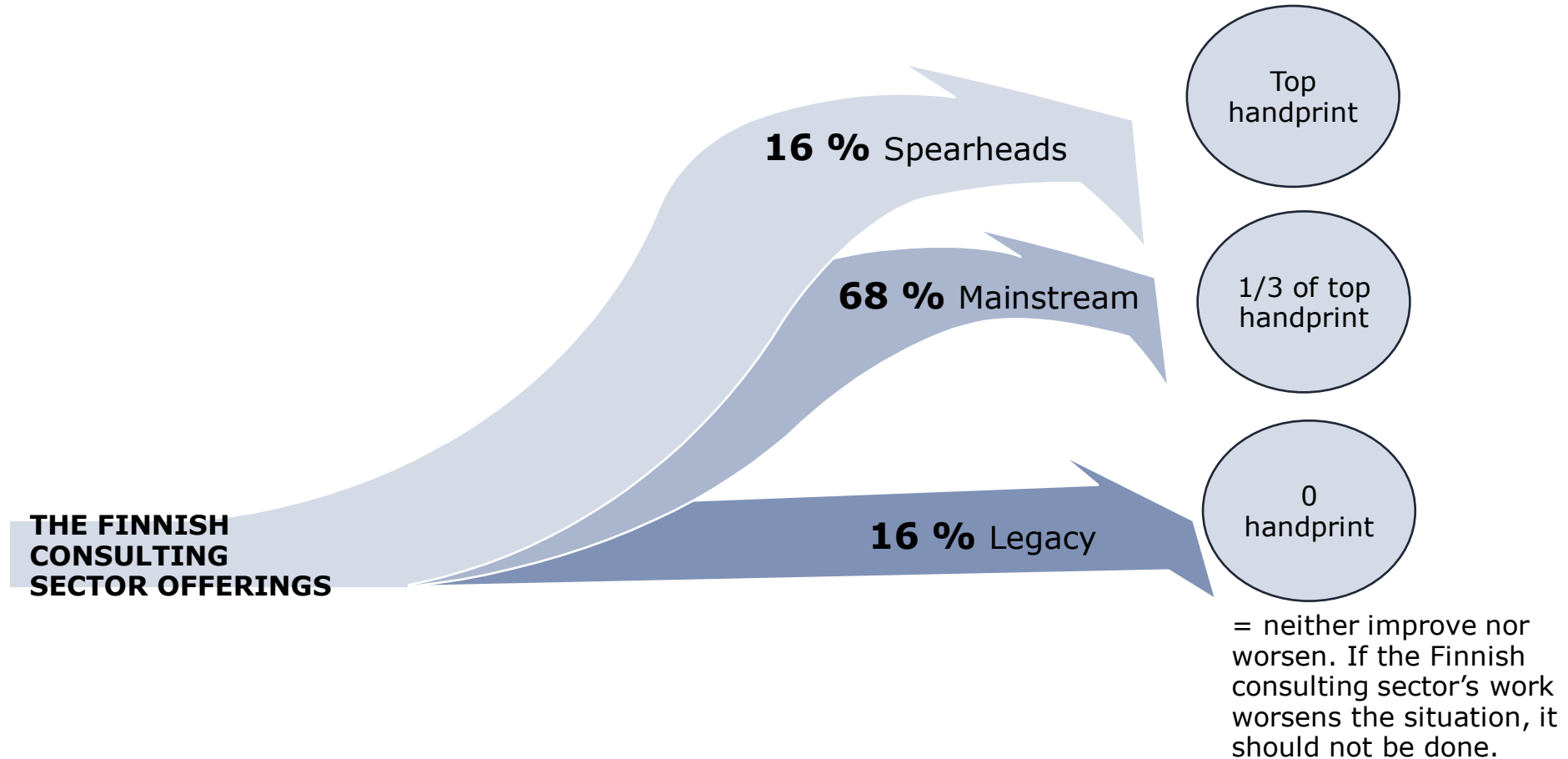
What are spearhead offerings?

STORY OF SPEARHEADS: WHY, WHAT AND HOW?

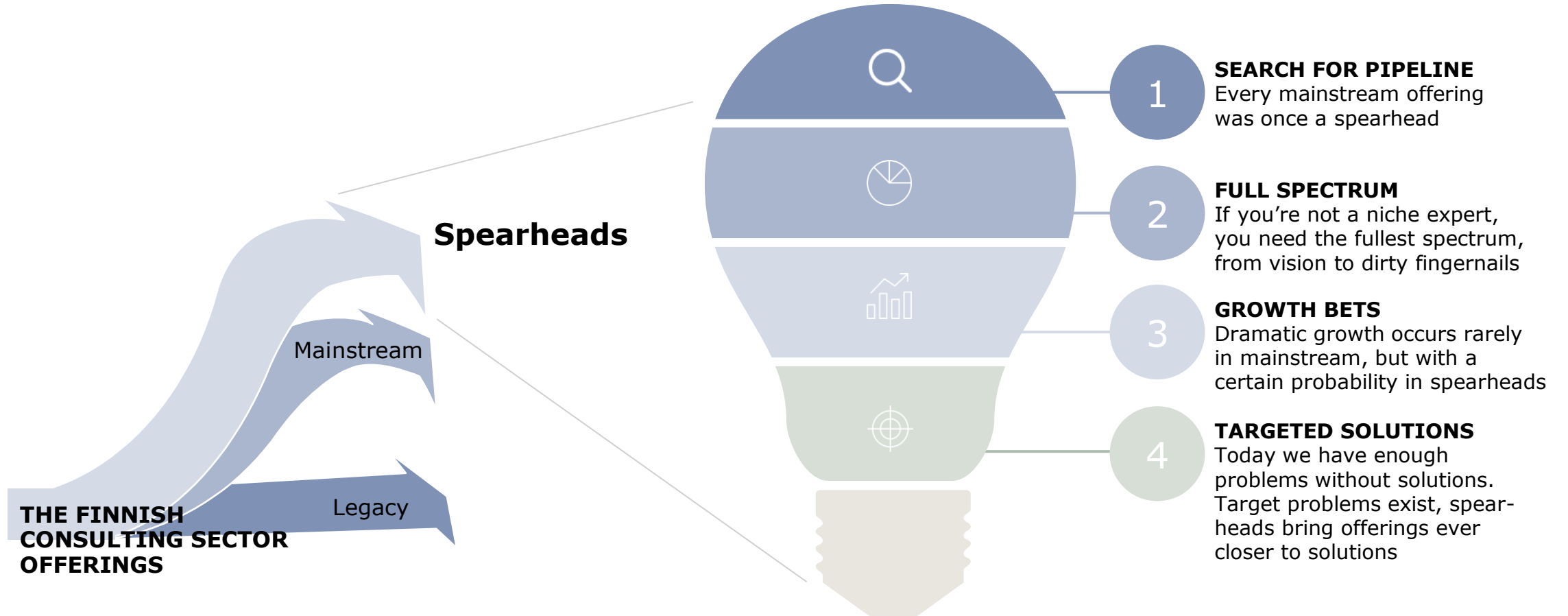
- New solutions are constantly needed by clients as the surrounding world develops and reshapes – developing spearheads is a natural part consulting work's organic learning to a certain extent.
- However, a company can gain a competitive edge by consciously putting efforts on internal research and development in order to deliver expectational and distinctive solutions.
- On the other hand, companies have an inherent incentive to develop spearheads because over time the spearheads become trending offerings and after a while even mainstream offerings. To put it differently, state-of-art offering slowly become mainstream leaving white space for new innovations to thrive and occupy the space. Thereby, there's always space for widening the offering.
- Spearhead solutions also tend to attract attention of young, ambitious and creative experts, which in turn, increases the overall attractiveness of the industry



Spearhead solutions tend to have the highest handprint potential



Why do spearheads?



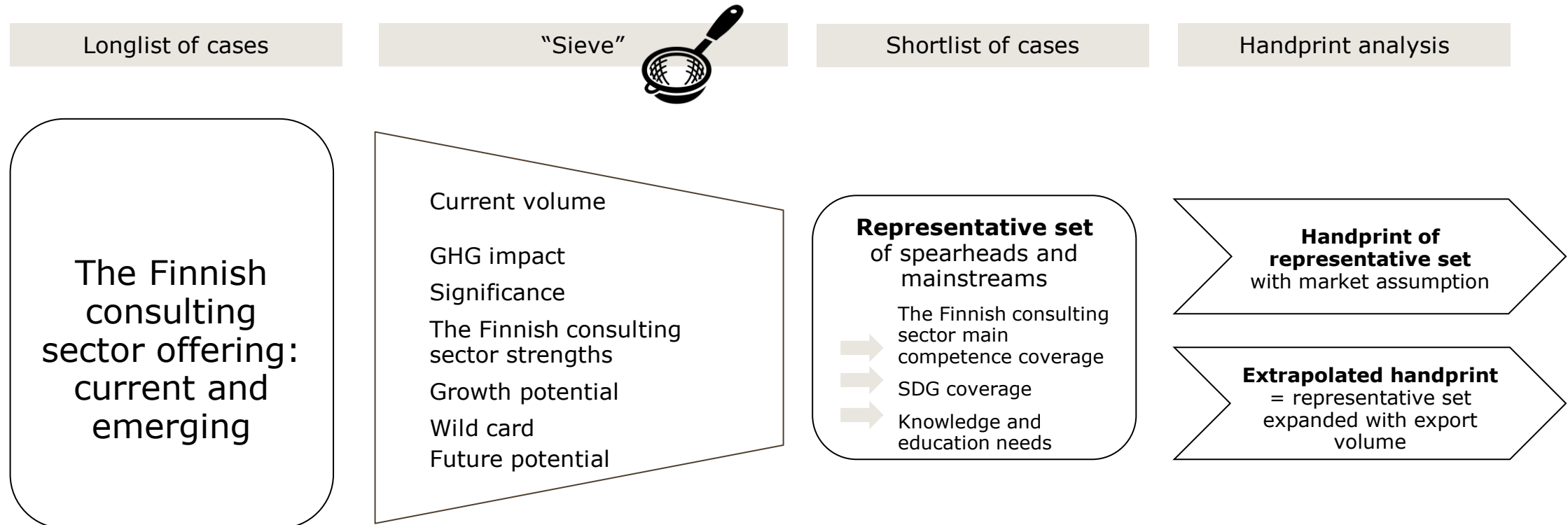
EXAMPLE

How to get from cases to a handprint consulting is a necessary part of?

1	Boundaries	Consulting turnover e.g. 450 MEUR/a, divided into two categories: e.g. 200 and e.g. 250 MEUR/a
2	Cases: creation	From <u>mainstream</u> and <u>emerging</u> offerings, form a group of cases covering main consulting types (e.g. 6 cases)
3	Cases: calculation	<u>Create/pick existing/emerging case</u> ; describe; <u>calculate savings</u> compared to starting state and <u>estimate consulting cost</u> , divide by consulting type
4	Scaling up: proportions	Examine area and research: what is a <u>typical division between spearhead/ mainstream/ laggard</u> projects?
5	Scaling up: performance	From cases and their proportions, <u>calculate avg. CO2/EUR for consulting type</u> . Assume 1/3 <u>efficiency for mainstream</u> , 0 handprint for <u>legacy</u> .*)
6	Reality check: full handprint, is it sellable?	Take <u>volumes</u> of spear/main/legacy by type, <u>multiply by avg handprint</u> = <u>full handprint as sum total</u> . Is the spearhead volume realistic?
7	Conclusions	Insights!

*) If our studies have a negative handprint, we should eliminate them from our services

Spearheads and mainstream offerings of consulting and design services are shortlisted to define a representative handprint



How do consulting and design services create a handprint impact

PRINCIPLES OF HANDPRINT

- The handprint refers to an emission reduction in carbon dioxide equivalents (tCO₂e) or positive climate impact enabled by a product or a service provided by another actor
- Consulting and design services may enable avoided emissions or positive climate impact as follows

a) Decrease existing carbon footprint with a better solution

Using a product or service avoids a footprint that otherwise would happen

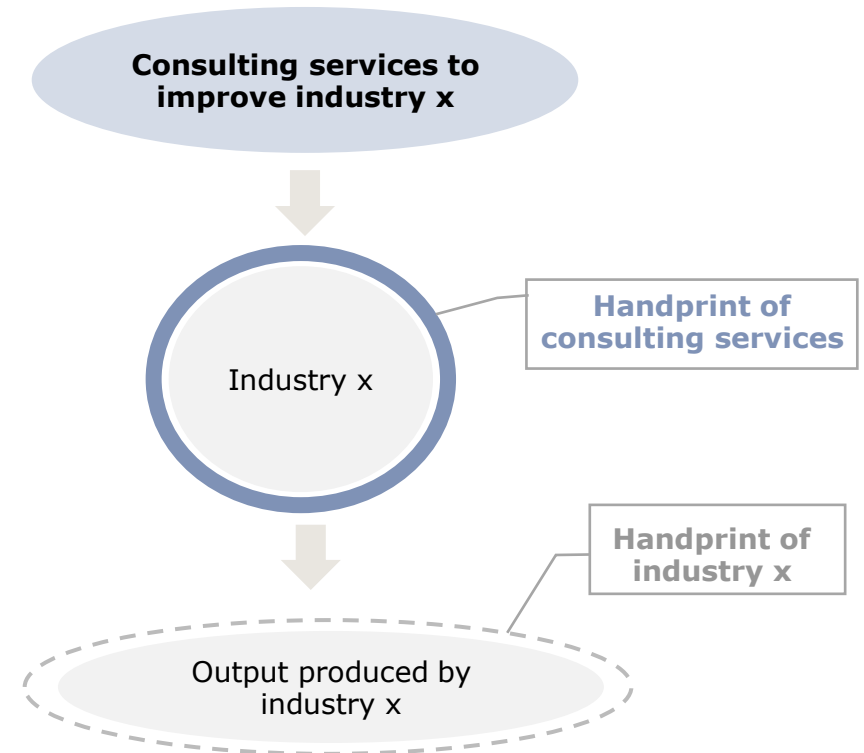


b) Create a new way to produce a positive impact

A product or service generates a positive climate impact that otherwise would not happen

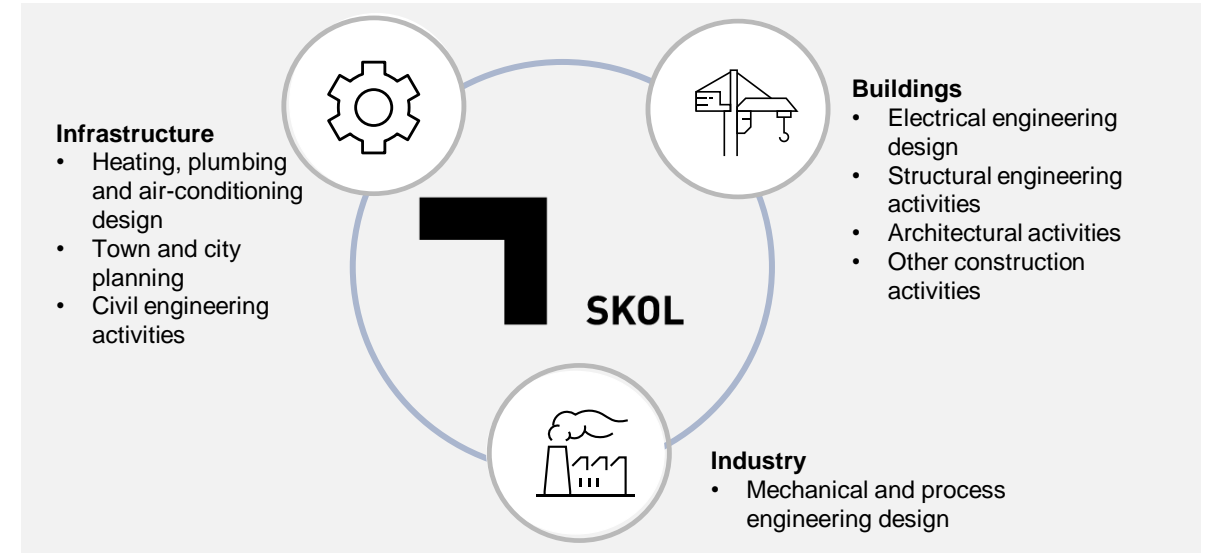
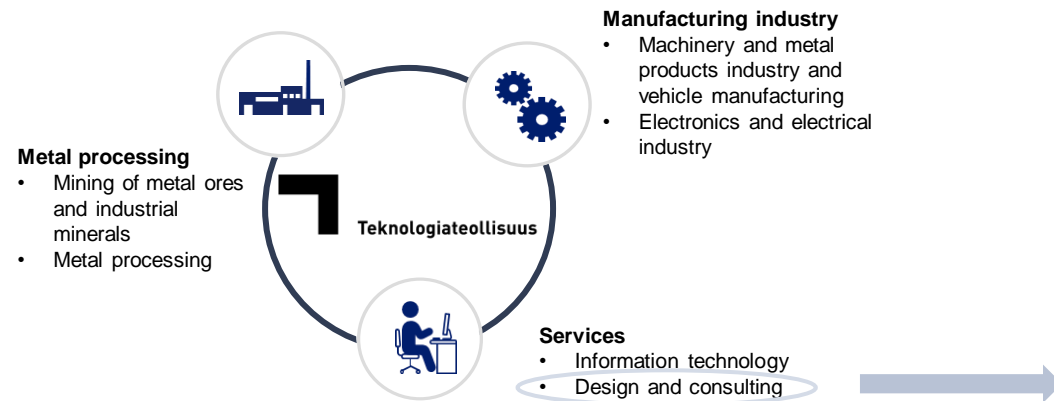


LIMITS OF MY TERMS OF REFERENCE ARE THE LIMITS OF MY HANDPRINT

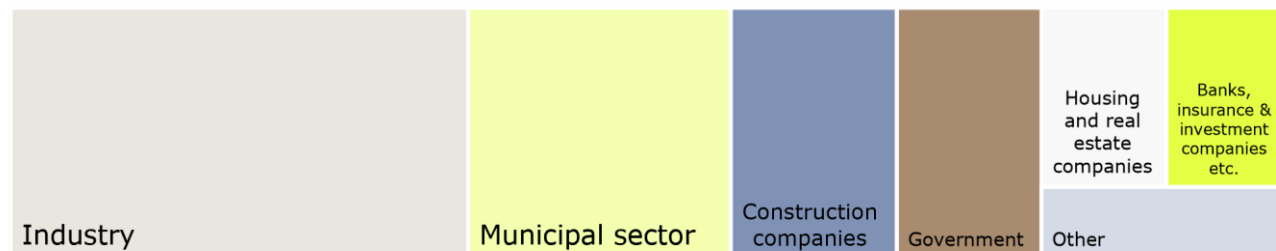


Who are Finnish consulting companies and how do they contribute to society?

Overview based on SKOL members



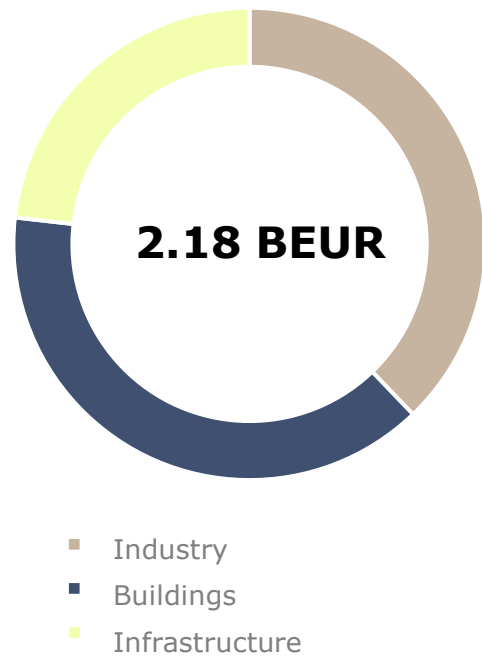
CLIENTS OF SKOL MEMBERS



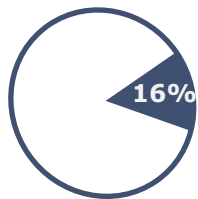
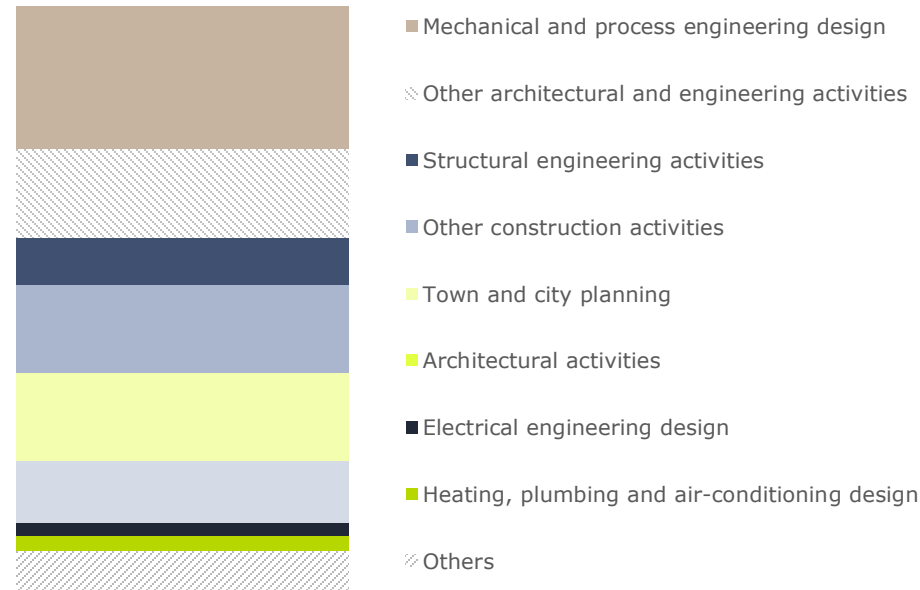
What are the key sub-sectors influenced by Finnish consulting companies?

Overview based on the SKOL members

TURNOVER OF SKOL MEMBERS

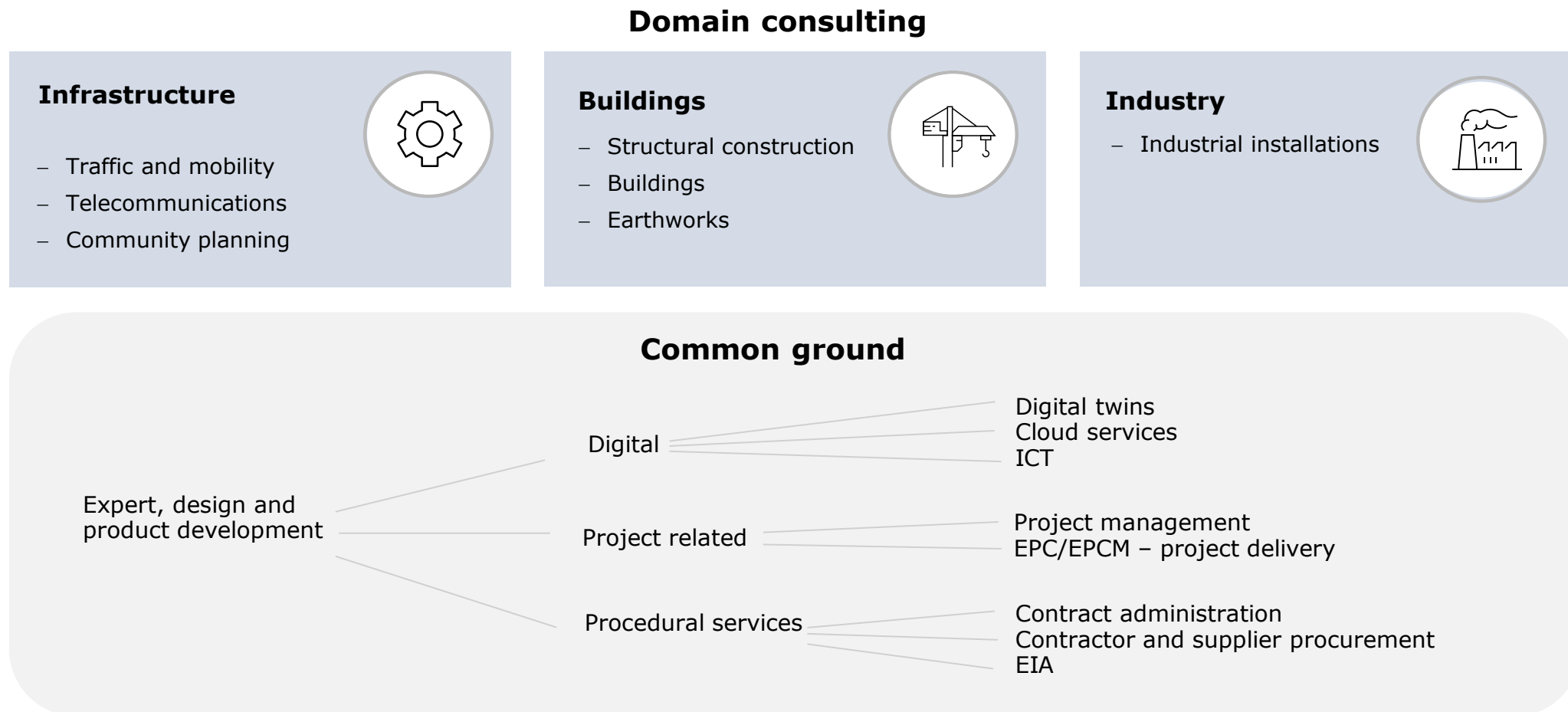


TURNOVER DIVIDED INTO SUB-SECTORS (2017)



Share of
**exported
services** by
SKOL members

There is a spectrum of typical offerings provided by consulting and design services that enable emission reductions in other sectors

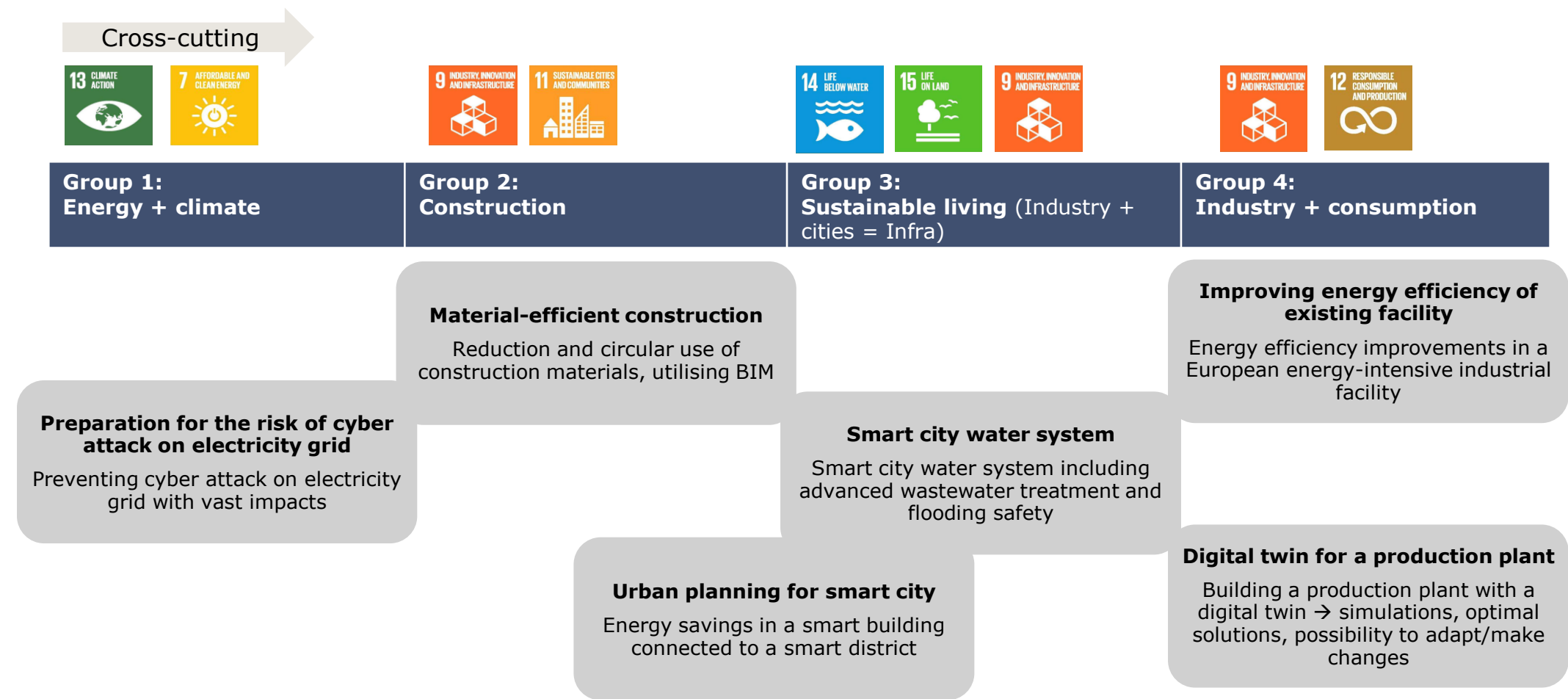


The Finnish consulting sector competence and SDG coverage – getting a representative set



	Infrastructure	KEY SDGs	Buildings	KEY SDGs	Industry	KEY SDGs
1	Roads and Area Design	11 9	Structural Engineering	11 9	Process design	7 12 13
2	Traffic Engineering	11 15	Heating, Ventilating, Air Conditioning	11 13	Plant Engineering	7 12 14
3	Environmental Consulting	13 14 15	Construction management	11 9	Electrical and telecommunications engineering	7 13

Handprint case pondering...



Two terms to note: "baseline" and "reduction per annum"

"BASELINE"

- In a handprint, one needs to compare what is accomplished with what otherwise would have happened. So, the baseline is:
 - BAU, business-as-usual, as in "outcome if work done in one way instead of the consultant's way"
 - BAU as in "no disruptive event such as a succesful cyberattack occurs"

The delta, the change achieved, is the point – in the overwhelming majority of cases, it is not even necessary to know details about the baseline, only about the changes to the baseline that happen

"SAVINGS/TURNOVER/ETC PER ANNUM"

- Most handprints are calculated using achieved changes per annum. This is motivated in most types of cases, e.g.
 - when consulting is part of achieving for instance a permanent change in operations, which results in a handprint of X ktCO₂/a of reduced emissions
 - when consulting is part of avoiding a disruptive event, e.g. a cyberattack, which is a one-off *per se*. However, unfortunately, having suffered a cyberattack does not give immunity against upcoming ones – the attackers and defenders are in a constant war of skills upgrading. Here, there is a market/probability per year of becoming a victim of cyberattacks, and that probability is never zero – there is always a "market"

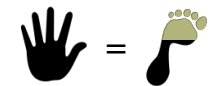
There's a fourth wave of consulting coming and the Finnish consulting sector's handprint is a key element of it

- Following handprint cases present handprint potential in the field where there's still space for major improvements – the cases are spearhead cases and are not currently largely implemented
- On top of the CO2 emissions, handprints shall describe industry impacts to biodiversity, social justice and transition towards circular economy to leverage the potential of the 4th wave of consultancy *"Reshaping consultancy for change in a changing world"*

HOW THE HANDPRINT IS GENERATED

a) Decrease existing carbon footprint with a better solution

Using a product or service avoids a footprint that otherwise would happen



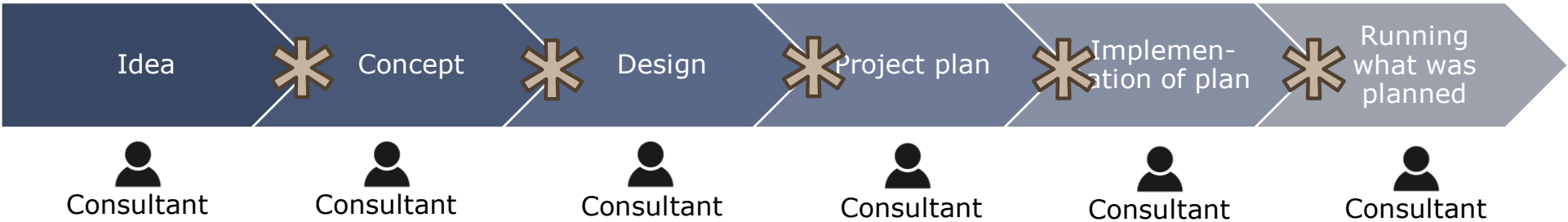
b) Create a new way to produce a positive impact

A product or service generates a positive climate impact that otherwise would not happen



The Handprint “Golden Collaboration Effect”

Building on others’ work together

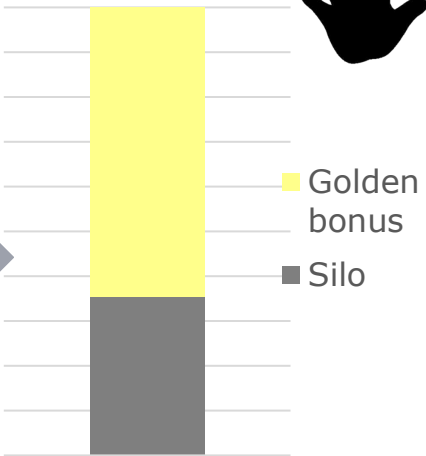
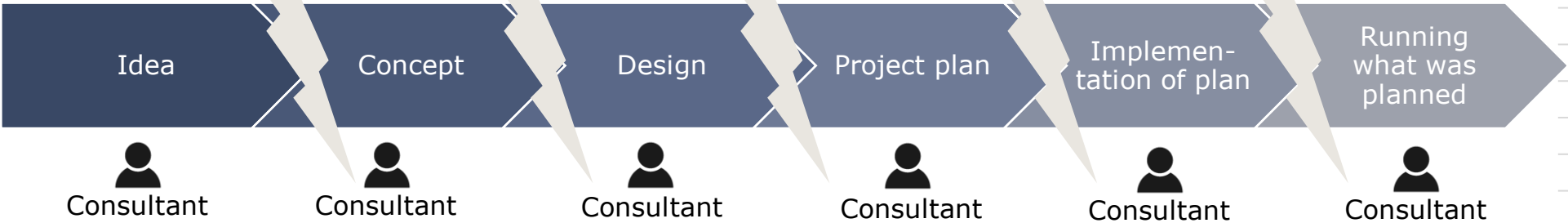


For e.g. an initial emission total in CO₂/a of 100 kt, any single stage reaches a max handprint of 25 kt/a. However, collaboration and cumulative savings bring the handprint to 65.5 kt/a

Overall handprint



Separate incompatible silos



Handprint



Handprint results

Scaling up from cases as described

Improving energy efficiency of existing facility

Background

Production of energy needed by industry causes one fourth of the global CO₂ emissions. Energy use of energy-intensive industrial processes can be reduced by applying a menu of solutions to have a remarkable impact.

Case

The process-specific menu includes elements such as technical improvements, heat recovery, process optimisation and adoption of new technologies. A suitable combination for an industry facility is prepared by the consultant.

Consulting handprint

In the case of European process industry facilities, the action plan and implementation support by the consultant could lead to an energy efficiency improvement of 10%. At an average European facility with the European average energy mix, the reductions in produced energy and purchased electricity would bring savings of 4,4 ktCO₂/a, or approximately 0,0088 tCO₂/EUR consulting.

Other impacts

Savings in energy use are also savings in costs, thus economic viability is also improved. Emissions other than greenhouse gases are also reduced.

CO₂ handprint

Energy efficiency actions at a facility save

4,4 kton of CO₂ eqv. per year

compared to a facility with business-as-usual improvements. This translates to approximately

0,0088 ton of CO₂ eqv. Per EUR of consulting
as a consulting unit handprint.

Handprints can also be seen on



Digital twin for a production plant with AI analytics

Background

A digital twin is a digital model that in real-time duplicates its real-world counterpart. Added sensors, data collection, connections and computing power have made digital twins possible. It can be used as a simulation tool, a monitor, a diagnostics tool, a smart maintenance system ... most uses remain to be invented. If an AI-based analytics system is based on top of the digital twin, the effect is manifold.

Case

A digital twin is built for a process industry plant. The plant is pre-existing, so the digital twin did not help in the startup or engineering phase. However, it is built by the consultant and the consultant also is part of an initial diagnostic over the first months.

Consulting handprint

With digital twin construction and consulting, a realistic estimate is 2-3 % energy efficiency improvement. With AI on top, this goes up to about 20 %. For our example plant, this translates to savings of 7000 MWh of purchased energy/year. Using Nordic standards, we arrive at savings of 520 tCO₂/a, or about 0,0052 tCO₂/EUR consulting.

Other impacts

A digital twin also helps in reducing accidents, to improve equipment effectiveness, to reduce maintenance costs and materials and bring in circular materials, and also to reduce downtime. The health and wellness aspects come in, mostly for the plant workers.

CO2 handprint

Preventing a cyberattack as described on the right avoids

520 ton of CO₂ eqv. per year

compared to avoiding an attack. This translates to approximately

0,0052 ton of CO₂ eqv. per EUR of consulting
as a consulting unit handprint.

Handprints can also be seen on



Preparation for the risk of cyberattack on electricity grid

Background

Cyberattacks have been a plague for decades, and they increase in frequency, sophistication and impact. The COVID period has among other things witnessed a rise also in malware. The impacts of cyberattacks on CO₂-emissions can be surprisingly significant.

Case

A malware attack strikes out two low-carbon 200 MW powerplants. The return to normal production and distribution takes two weeks. During that time, electricity production is lost, and has to be replaced by back-up coal power. The change in emissions between the stricken plants and the back-up coal plants amounts to 32 ktCO₂ due to the high coefficient of coal.

Consulting handprint

With a cyberconsulting assignment, which Finnish consulting companies provide, this cyberattack could have been prevented. Thus, the handprint of the unit assignment is 32 ktCO₂ and an estimate for the cyberconsulting unit handprint is 0.32 tCO₂/a (assumed: this one event during the year)

Other impacts

A power blackout can cause severe disturbances in heating, goods distribution, also e.g. medical emergencies. The social SDG dimension of a cyberattack is one of its great dangers.

CO₂ handprint

Preventing a cyberattack as described on the right avoids

32 kton of CO₂ eqv. per event/year

compared to avoiding an attack. This translates to approximately

0,32 ton of CO₂ eqv. per EUR of consulting
as a consulting unit handprint.

Handprints can also be seen on



Health and
wellness



Preparing for
climate change
impacts



Quality of
living



Material-efficient construction

Background

Environmental impacts of construction materials production can be reduced remarkably in the construction planning phase. Concrete, steel and aluminium have the highest impact, cement production alone causes 3% of the global CO₂ emissions.

Their use can be reduced by improving materials management to avoid waste in construction. In addition, materials efficiency can be made better by design. Design for disassembly promotes reuse and recycling of building components at the demolition phase.

Case

The consultant develops a plan targeting to waste reduction in the construction phase and to increased reuse of building materials. Building information modelling (BIM) is utilised to facilitate the more efficient use of construction materials and components.

Consulting handprint

The impact of the actions is estimated to be 15% reduction in the production of new construction materials. In the case of new Finnish average-sized block of flats this means savings of 3,6 tCO₂/a.

Other impacts

The use of natural resources and the amount of waste are reduced, while circular economy is taken forward.

CO₂ handprint

Reduced waste in construction of a block of flats and improved reusability of building components save

3,6 ton of CO₂ eqv. per year

compared to a traditional construction site, per one year of the block of flat's lifetime of 50 years. This translates to approximately

0,00014 tons of CO₂ eqv. per EUR of consulting
as a consulting unit handprint.

Handprints can also be seen on



Smart city water system

Background

Wastewater treatment plants typically consume 30 to 60% of municipal energy demand. Therefore, significant emission reduction potential relies in increasing the energy efficiency of such plants by improving the optimisation of technological processes in smart cities.

Case

Smart water grid, smart sewage system and smart (network) management characterise future cities that enable solving problems of optimal control. Predictive diagnostics, validation and reconstruction of data together with soft sensors allow precise system calibration real time, which enhances the overall energy efficiency of waste water treatment plants.

Consulting handprint

Approximately 45% of the electricity consumed by the biological waste water treatment plants is used in the aeration process to drive blowers. Hence, with spearhead computational solutions implemented as a result of engineering consulting emission reductions of 427 tCO₂/a can be achieved at a wastewater treatment plant of an average size.

Other impacts

Smart city water system secures affordable and safe water for citizens and improves the quality of natural waters nearby. Smart system is also designed for advanced flood handling, which is of a growing importance.

CO₂ handprint

Predictive diagnostics and smart computational process optimisation in an average size wastewater treatment plant reduces

427 ton of CO₂ eqv. per year

compared to a traditional biological waste water treatment plant. This translates to approximately

0,0085 ton of CO₂ eqv. per EUR of consulting
as a consulting unit handprint.

Handprints can also be seen on



Urban planning for smart city

Background

Smart cities aim at sustainable societies, and technological means can among others bring many environmental benefits. Production of energy used in buildings covers almost one fifth of global CO₂ emissions, and smart buildings can reduce those in various ways.

Case

A smart building is designed to have advanced control of heat and electricity flows. Energy and also water can be saved with real-time monitoring and control systems, and thermostats with machine learning capabilities bring comfort and savings in heat. This also supports matching the use better with the supply, advancing demand response. In addition, the buildings could be connected to a district-wide intelligent energy system that allows the building to both use and produce energy, and enhances reliability of energy distribution.

Consulting footprint

A new average-sized Finnish block of flats could reach at least 10% electricity and heat savings with smart solutions. By also utilising local electricity network and storage for cleaner power, the impacts together correspond 11,2 ton of CO₂ eqv.

Other impacts

A district can be 3D-modelled to assist smart city planning and development. The district digital twin can be used for life cycle observation, e.g. simulating impacts of changing weather conditions, or for smart city design, testing, service development and stakeholder collaboration.

CO₂ footprint

Advanced control of energy flows in a block of flats reduces

11,2 ton of CO₂ eqv. per year

compared to a traditional block of flat built in 2010s. This translates to approximately

0,00048 ton of CO₂ eqv. per EUR of consulting
as a consulting unit footprint.

Footprints can also be seen on



Using network analysis to quantify consultants' roles

NETWORKS

1) Players, among them the consultant(s), form a network

Meaning: There are usually more partners and stakeholders involved – things do not go linearly, instead the players are connected in various ways across the project

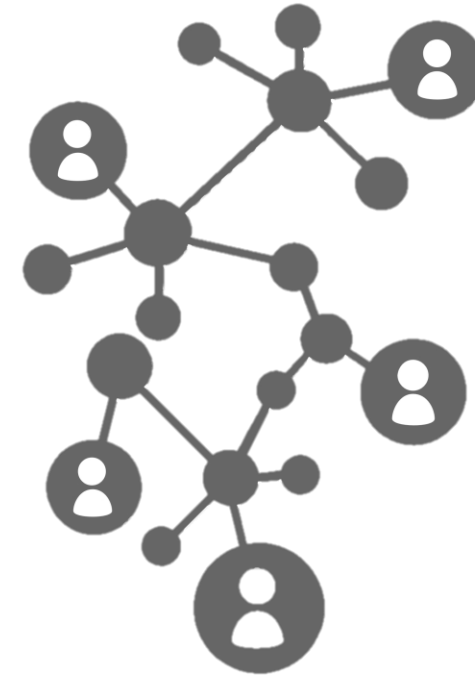
2) It is possible to quantify different aspects of the network

Meaning: using SNA (Social Network Analysis) methods, it is possible to quantify a surprising amount of dimensions in the network itself and for the individual players

3) Among the quantifiable dimensions: how central? How far-reaching? How much of a broker position?

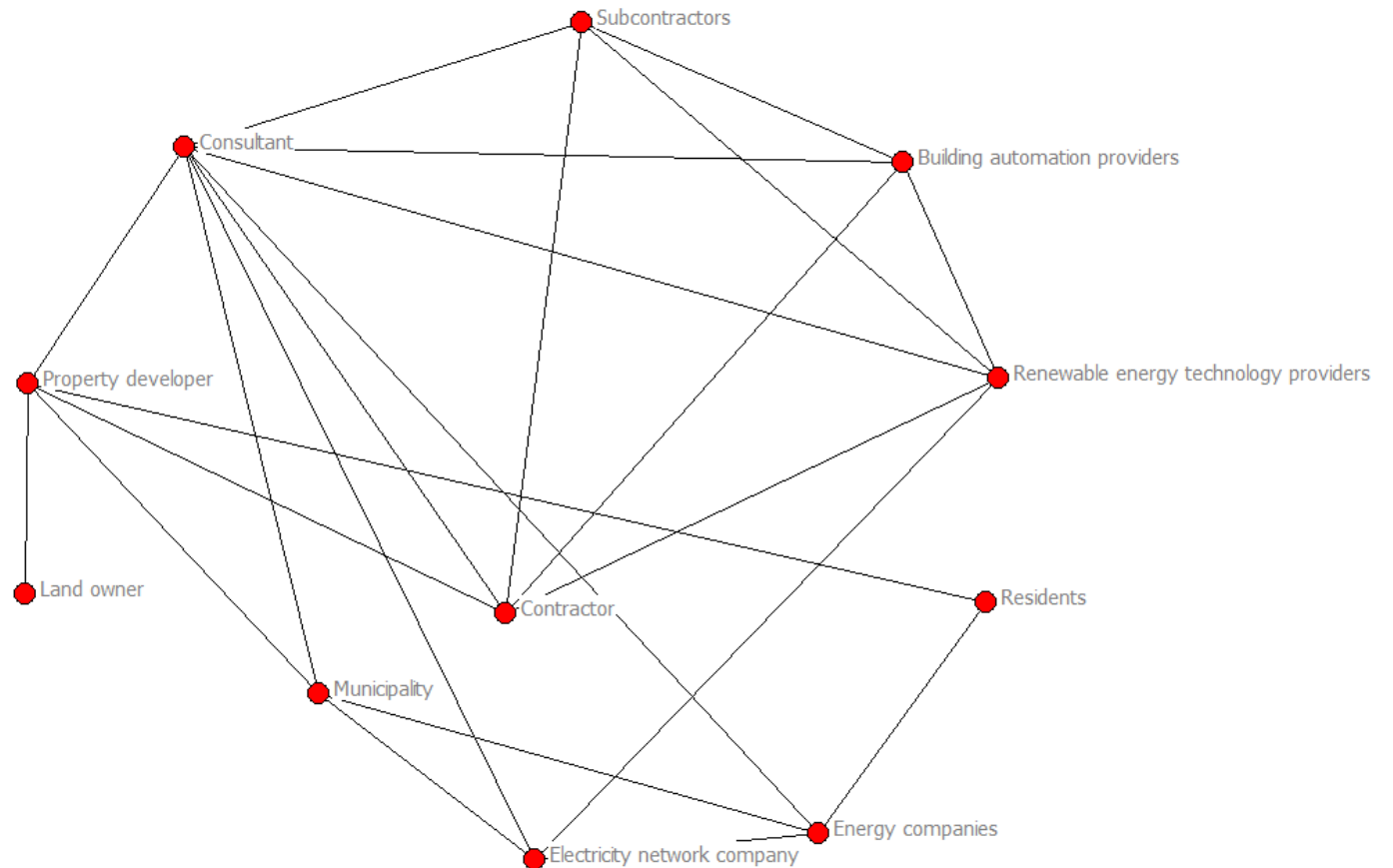
Meaning: the different aspects of a network and its players help to quantify and shape into "proportional power" e.g. the reach inside the network and the broker role (= how much passes through one player), which could be used to weigh the role of the players in a project.

INTERACTIONS AS A NETWORK – MANY PLAYERS AND TYPES



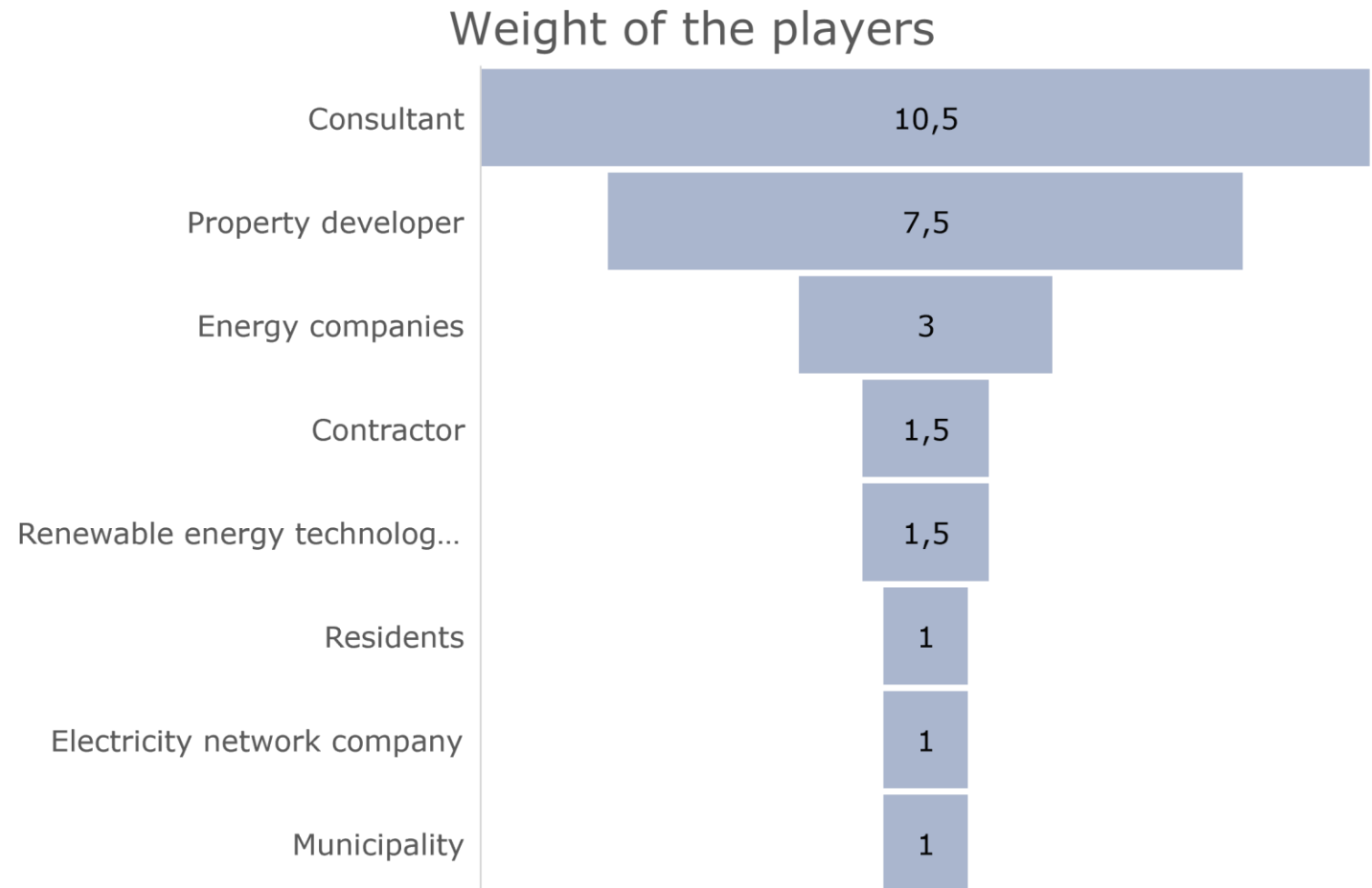
Example case network - interactions

- The network describes the interactions between players in the case of smart building with advanced control of heat and electricity flows, connected to a district-wide intelligent energy system
- Without analysis, what can be seen is a fairly complex web
- With analysis, many things about
 - the network itself
 - the players roles and powerbecome clearer



Example case network - influence

- The “weight” of the players in the network can be calculated in many ways
- The weight of consultant in the smart building case is 10,5 times higher than e.g. residents, when measured by the interactions
- It should be noted that the property developer sets the main specifications and requirements for the consultant
- Subcontractors have no weight because of their straightforward role in the project



When things are weighed, where does the consultant working in a Finnish consulting company stand?

1.9 tCO₂/employee-year



2500 tCO₂/employee-year

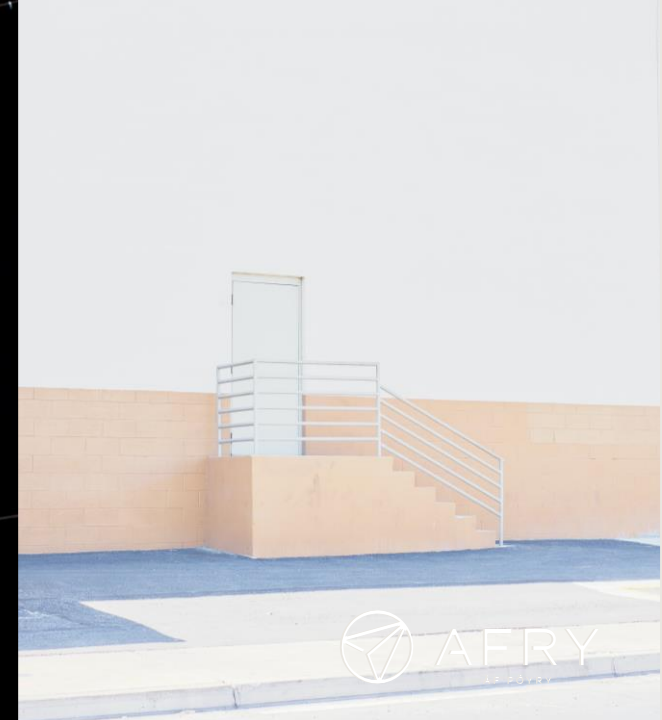
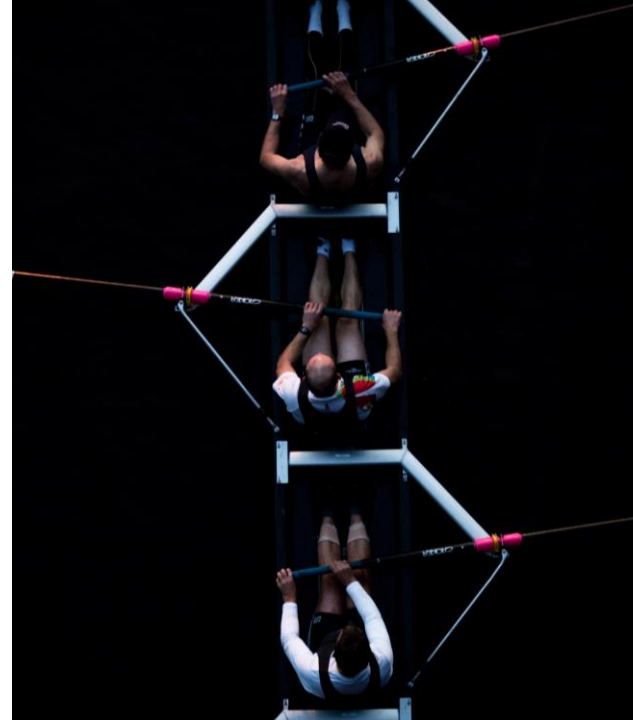
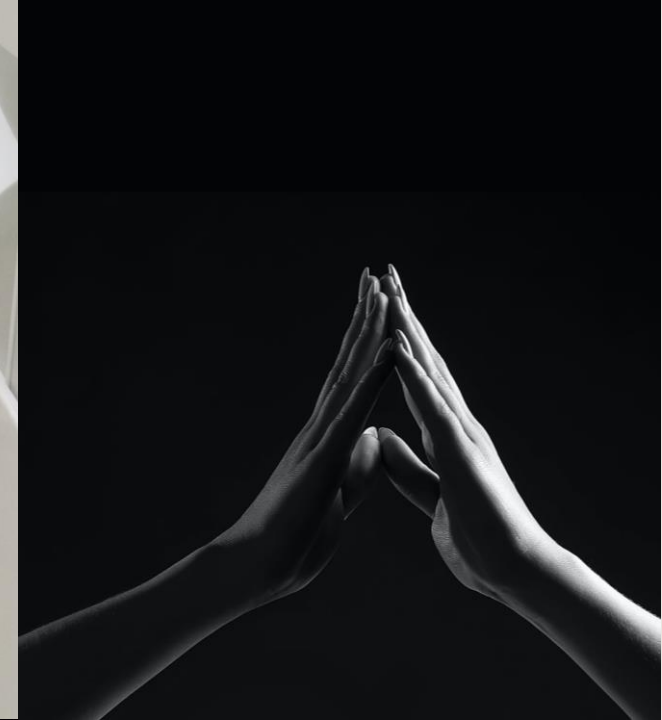


Proportion handprint/
footprint per employee:

1300: 1

Content

1. The key messages
2. The social value created by the consulting sector
3. The low carbon roadmap and handprint of the consulting sector
 - 3.1 Footprint
 - 3.2 Handprint
4. Sustainable value creation of the consulting sector now and in the future





4. Sustainable value creation of the consulting sector now and in the future

Tenets

1) **COMPETITIVE DEVELOPMENT** Offerings and markets develop. Companies have an offering portfolio and encounter market demands

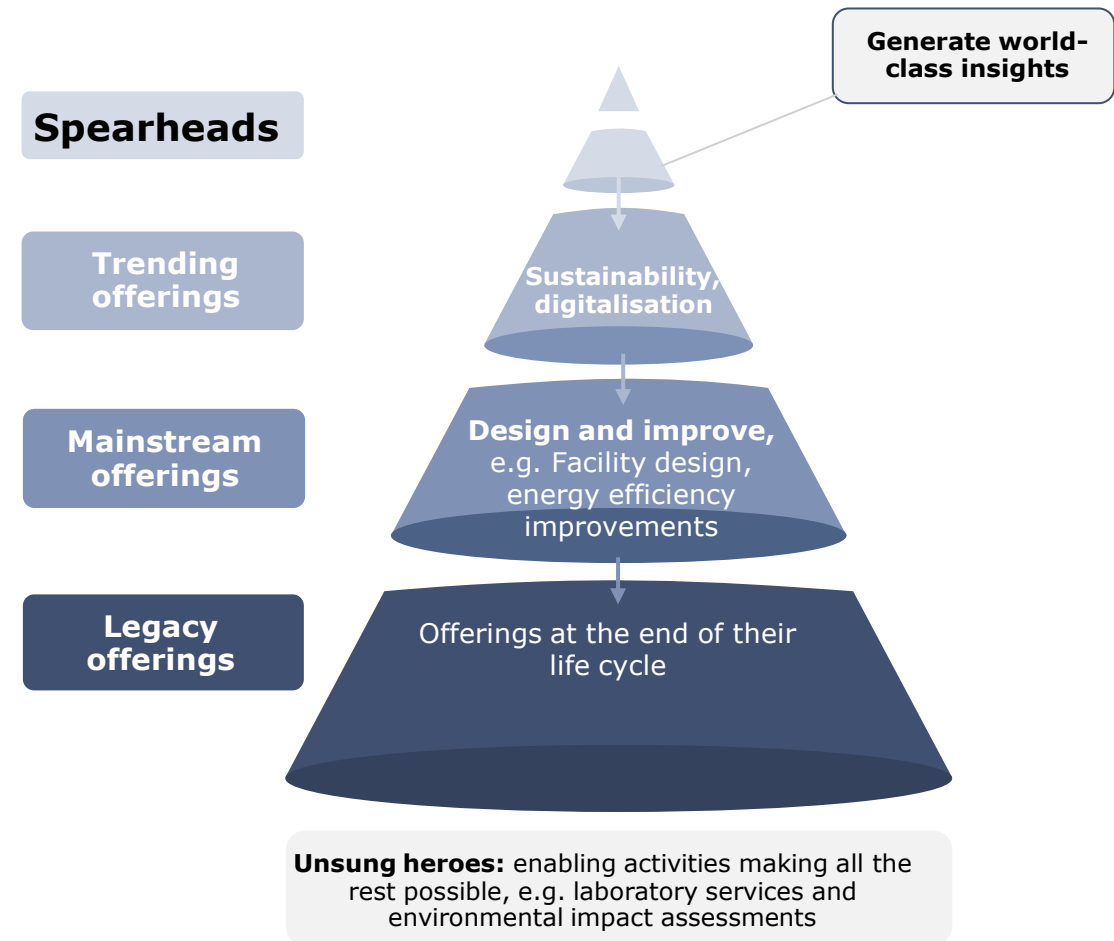
2) **JUST THE RIGHT AMOUNT AHEAD** Falling behind markets is destructive, keeping the right amount ahead of markets is optimal. (Just matching markets exactly: perfect, infeasible, really, and markets surprise – a buffer needed to quickly bring in new offerings)

3) **TRACKING MARKET/OFFERING BALANCE** How does the balance between offering/market development speed develop by company/sector/nation/continent?

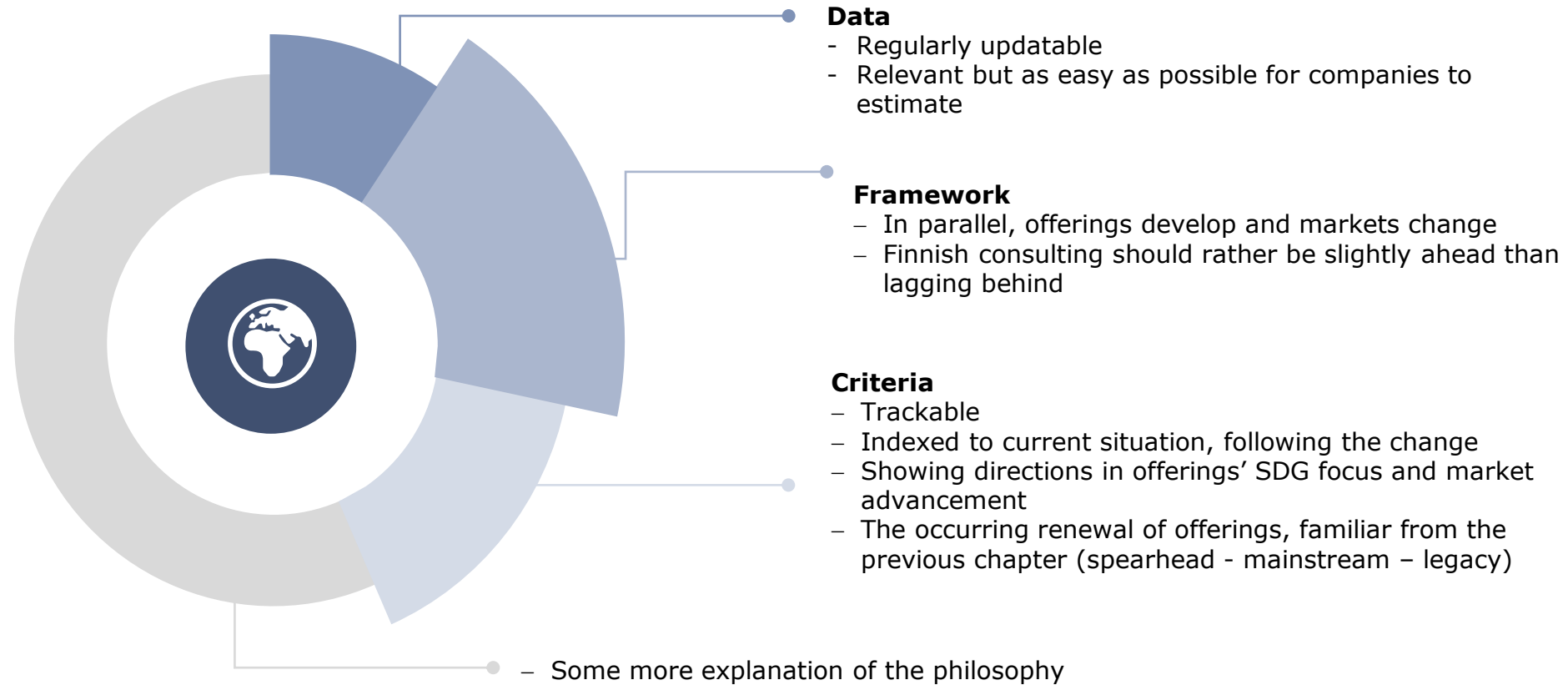
4) **TRACKING MARKET/OFFERING MATCH** How does the offering and development direction match market demand and development direction? Is there a "gap"?

Sustainable value creation now and in the future – the “trickle-down” cone

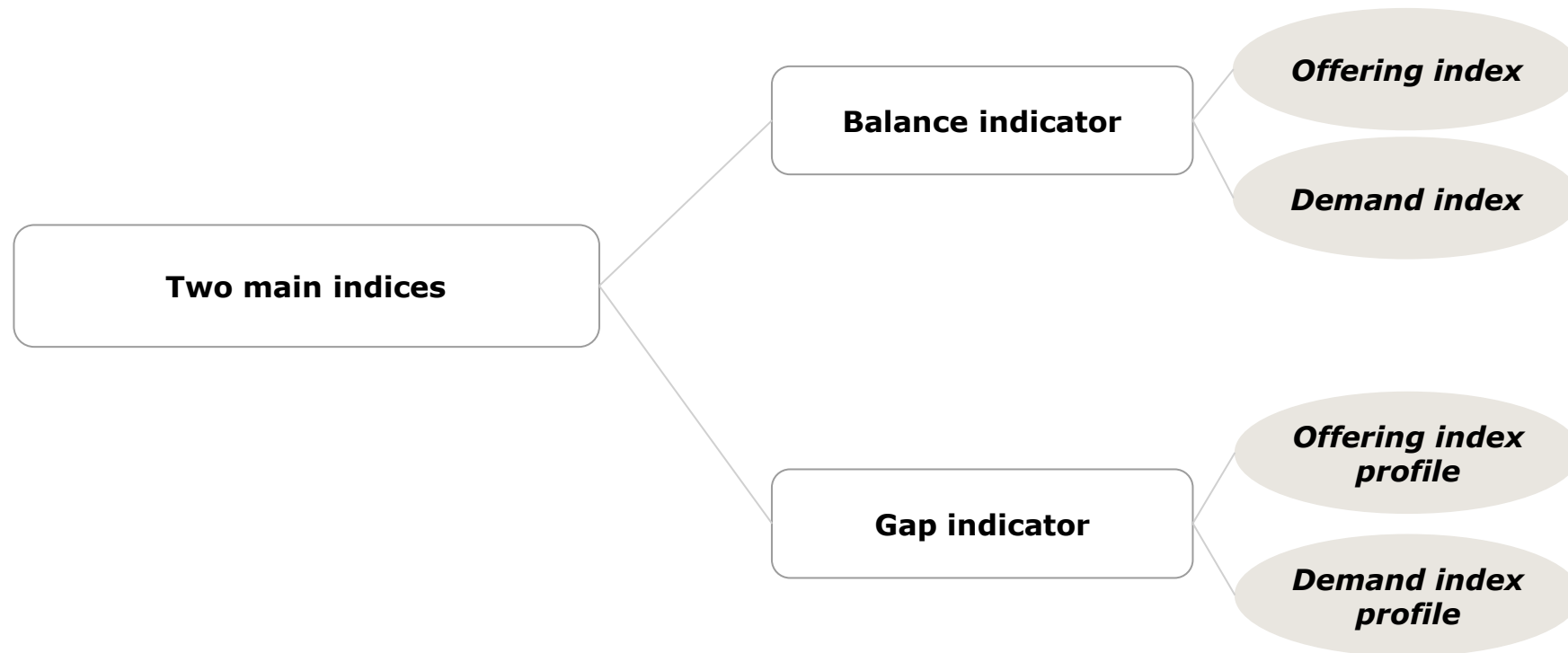
- Ideally
 - renewal of offerings is constant
 - it is based on both market foresight, demand signals and anticipation of client needs – consulting is a forerunner as part of its very nature
- Likewise, offerings have a life-cycle where the value “trickles down”
- **Spearheads** ride slightly ahead or “surf the wave”, help promote mainstream business and generate advanced, high value-added revenue in new areas or new ways
- Spearheads become **mainstream** when they are widely adopted, more “standardised” in execution and when they are more easily propagated across the organisation. With **suitable upgrades**, mainstream offerings may have a very long life
- **Legacy** offerings have a longer history, are no longer viable in many markets, but stay on as something that is not even advertised but asked by an increasingly small segment of clients. Legacy, in the best case, disappears peacefully in lack of demand – or e.g. due to unacceptable sustainability performance.



What is needed to track the development of sustainable value creation of the consulting sector



Criteria framework built on offering and market development comparison



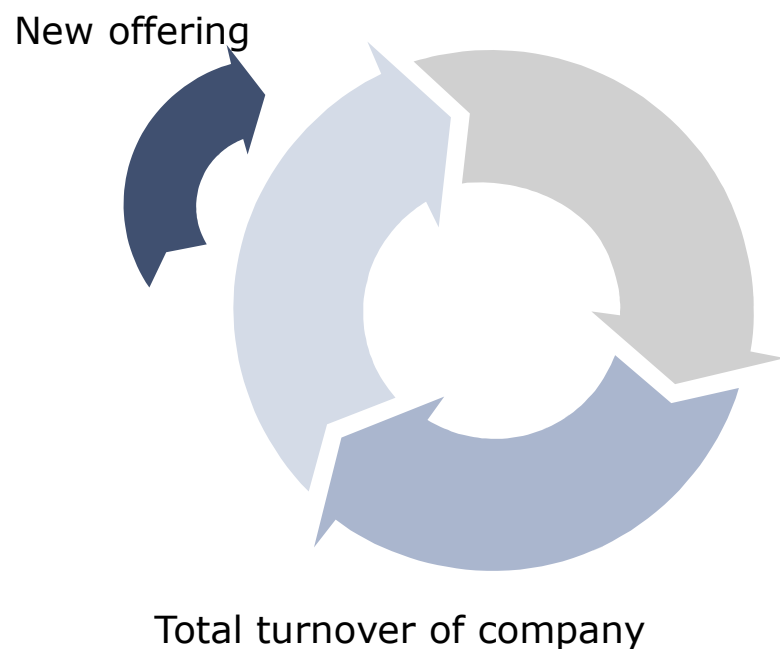
Offering development by SDG focus and intensity

SDG BASKET	INCLUDED SDGs	ANNUAL CHANGE IN COMPANY'S OFFERING
Climate	 	☆☆☆
Social	       	☆☆☆
Ambient (Environment, incl. biodiversity and local emissions)	 	☆☆☆
Modern sustainable society	    	☆☆☆

Semi-quantitative:
 0=no impact
 1=some
 2=notable
 3=major impact

RENEWAL RATIO

Renewal ratio: Offering portfolio change by share of new services and products (“continuous improvement by continuous renewal”)



ANNUAL CHANGE IN COMPANY'S OFFERING

Percent of renewal of offering
(% of total turnover)

Criteria for “new”

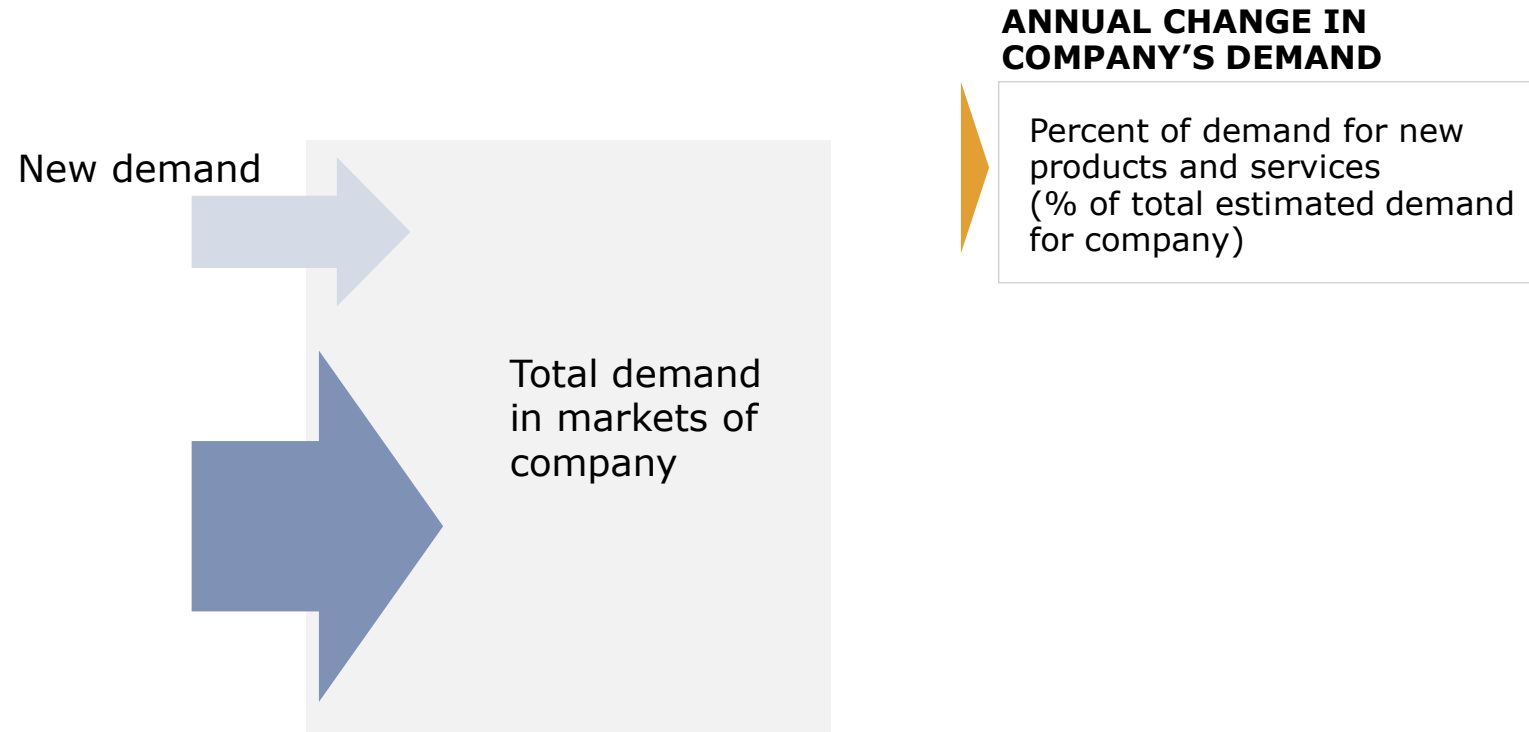
- Existing service or product conquers a new market
- or
- A product or a service is new
- or
- Mainstream offering has been further developed, e.g. by new production methods
- or
- Offering RDD support for a client

Market development by SDG focus and intensity

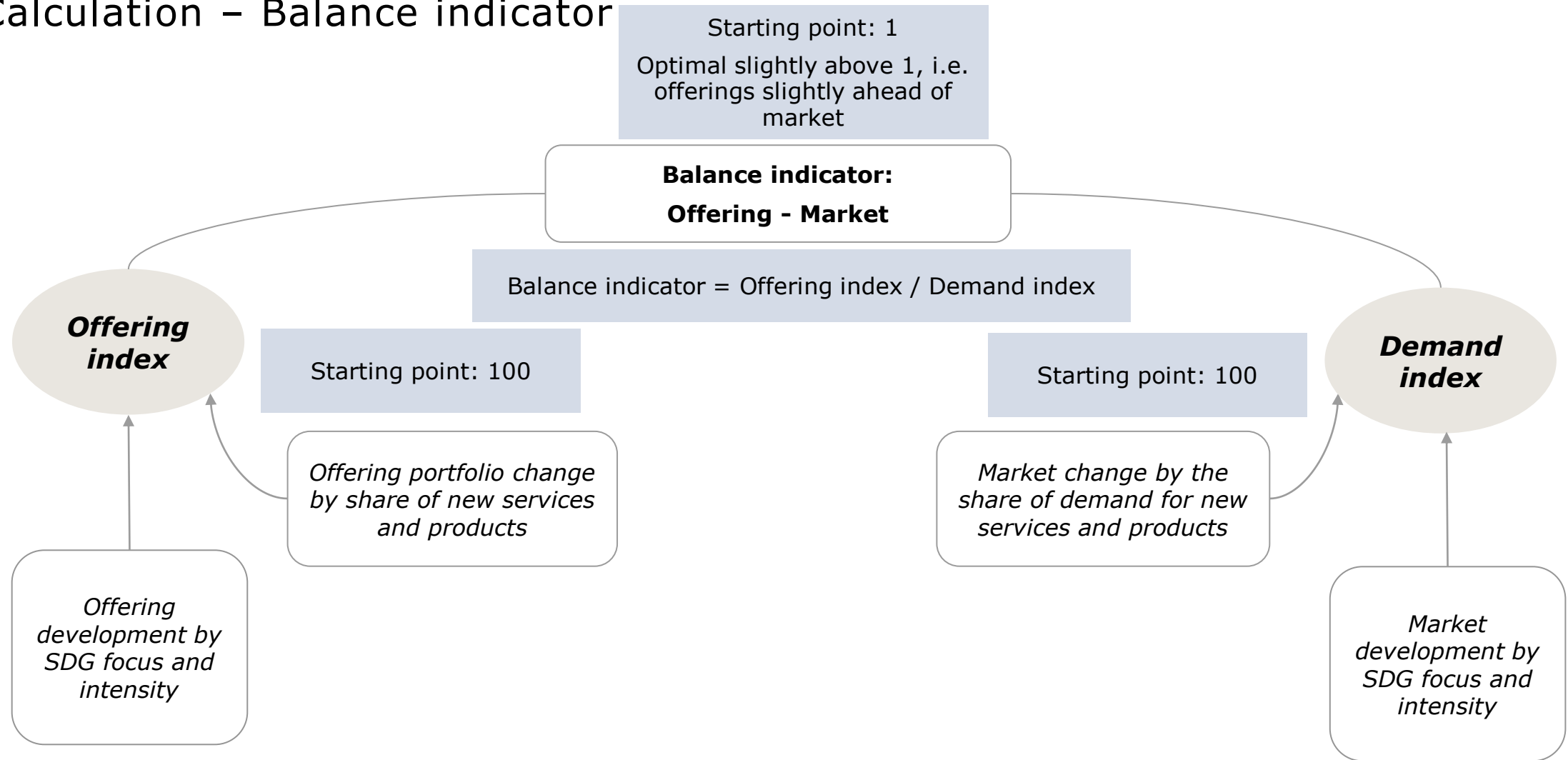
SDG BASKET	INCLUDED SDGs	ANNUAL CHANGE IN COMPANY'S DEMAND
Climate	 	☆☆☆
Social	       	☆☆☆
Ambient (Environment, incl. biodiversity and local emissions)	 	☆☆☆
Modern sustainable society	    	☆☆☆

Semi-quantitative:
0=no impact
1=some
2=notable
3=major impact

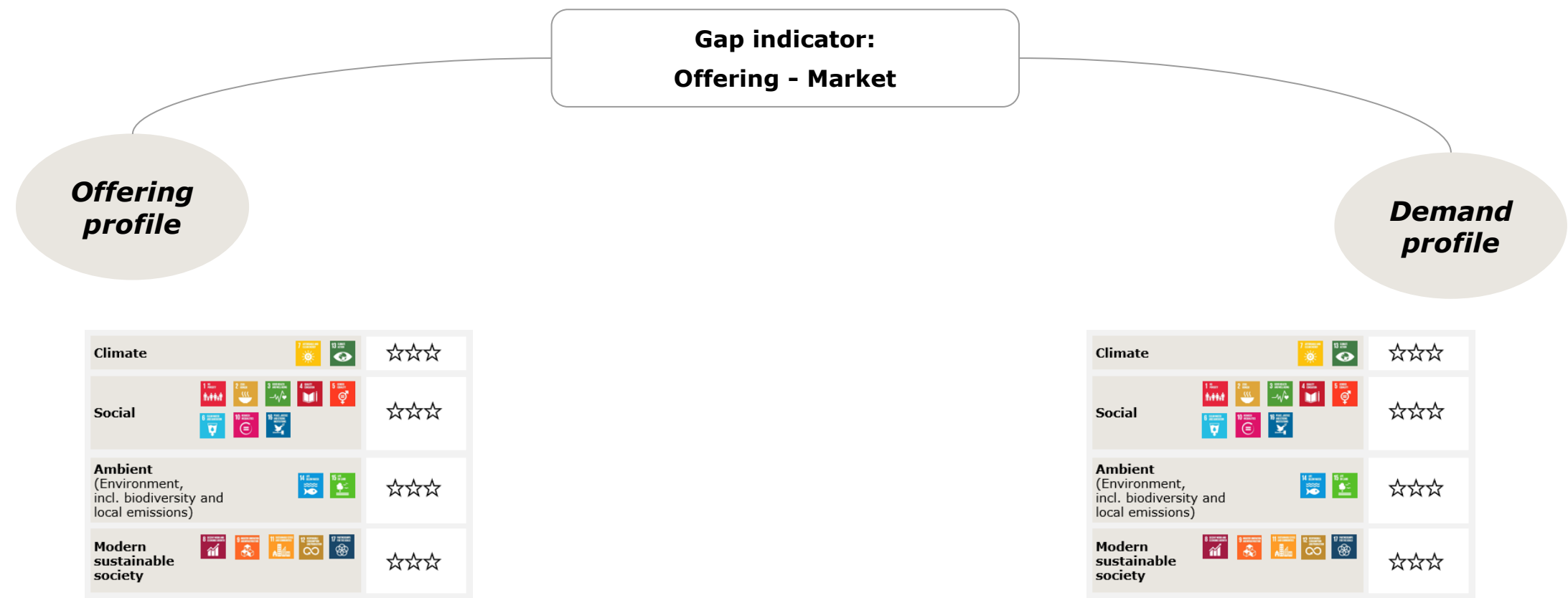
Market change by the share of demand for new services and products



Calculation – Balance indicator




















Calculation – Estimation of gap indicator



Example questionnaire, page 1/2: Offering

1. How much your offering has grown during the recent year in the following areas?
No stars = not at all
3 stars = very much

Climate	 	☆☆☆
Social	       	☆☆☆
Ambient (Environment, incl. biodiversity and local emissions)	 	☆☆☆
Modern sustainable society	    	☆☆☆


















2. How much new offering you have developed during the recent year? Please estimate the percentage of renewal as a share of new offering from total turnover.
- Example: Total turnover 20 000 MEUR, new offering 3 000 MEUR*
→ *percentage of renewal = 3 000 /20 000 = 15%*

Share of new offering

%

Example questionnaire, page 2/2: Demand

3. How much your demand has grown during the recent year in the following areas?
No stars = not at all
3 stars = very much

Climate	 	☆☆☆
Social	       	☆☆☆
Ambient (Environment, incl. biodiversity and local emissions)	 	☆☆☆
Modern sustainable society	    	☆☆☆

4. How much demand for new offering you have noticed in your markets during the recent year?
Please estimate the percentage as a share of new demand of total demand of your markets.

Example: Out of 20 MEUR of requests for proposal, 2 MEUR are for new offerings. Answer = $100 \cdot 2 / 20 = 10 \%$

Share of demand for new offering

%

Where does consulting go from here?

FINDING THE DIRECTIONS

- Traditional market studies will be facing a hard time – they can surprisingly easily already be (partly) automated, data collected and conclusions edited
- This is an example of the coming shift in the “fourth wave of consulting”
- However, what has been shown here can be used as part of a toolkit to redirect consulting offerings
 - by creating spearheads that match rising waves of SDGs or new needs from society, sustainability and technology
 - by closely tracking and matching own offering covered with market demand and change signals
 - by e.g. systematic tracking with indices such as the one described on the previous pages
- The next wave of consulting is a gradual transition. By smartly renewing with **spearheads (as in the handprint cases)** part of the offering portfolio each year, by carefully examining coming demands and market signals and upgrading **mainstream** to stay competitive – and by giving up **legacy** offerings at the right time

DIRECTION – AND “NO-GO”



Making more business for sustainable value creation from a small smart country

The advantage of being small and hopefully quick

Small mammals outlasted big dinosaurs. **The global consulting markets**, especially in a growing area such as issues with a strong sustainability dimensions, **far outweigh Finnish capacity**. If the Finnish consulting sector can adapt quickly, on a strong foundation of knowledge, it has a market far outside what it can fill.

Don't estimate huge global market sizes – instead, make sure there is room for you. How much more room there is, is irrelevant.

The point is NOT whether the market for e.g. mainstream transport consulting globally is X00 billion annually. The point is:

- is there enough room in the market for what you have to offer
- are you competitive in what you offer

If those two conditions are met, it doesn't matter what the other, larger ones do.

Hence, the criterion in the handprints was also not how large the global market was (nice to know, but not to be filled by Finland). The criterion was: if we are competitive, is there a market for what we offer?

The value creation race: the low value-added tasks can usually be done more cheaply somewhere – and automation comes in. Keep ahead of the "death wave"

Competing in mass-market, less-demanding consulting on global markets (Finland is part of the global market!) is a problem is one has to compete on cost alone. Somebody can always do what we do cheaper, at close-enough quality. What matters is whether we can keep ahead of the wave of low-cost, move along advanced offerings, outcompete others in sustainability and harness automation.



Annex

Output from the Sustainable value creation project workshop 7.10.2021

Työpaja 1: Vaatimukset ja toimenpidesuosituksset, kestävän arvonluonnin kasvattamisen edellytykset, 1/4

Vahvuus:

Kommentin sisältö	Tykkäysten määrä
Jatkuva oppiminen keskiöön. Koko konsultointiala pitää saada mukaan, myös ne asiantuntijat jotka eivät varsinaisesti toimi kestävän kehityksen parissa. Miten voidaan tukea oppimista ja omaksumista laajalti kaikissa tehtävissä toimivia?	6
SKOL:in jäsenten toiminnan kestävyiden vahvempi esiintuominen vetää puoleensa myös huippuosaajia, kun heistä ovat kisaamassa muutkin.	5
Voisimme sitoutua hiilijalanjälkivähennyksiin osallistumalla johonkin suurempaan sitoumusorganisaatioon, esim. race to zero. Olisi hienoa löytää konsulteille sopiva ja asiakkaidenkin kirittämiseen kannustava sitoumus (kuten Net Zero Carbon on kiinteistönomistajille)	4
EU-lainsäädännön ja sustainability-politiikan kehityksen seuranta ennakoivasti	1
Kunnianhimoiset tavoitteet energiatehokkuudelle ja päästövähennyksille koko EU-alueelle.	1
Päästövähennystavoitteet luovat uutta liiketoimintaa ja kasvumahdollisuuksia konsulttialalle.	1
Konsulttipalveluiden hiilijalanjälki muodostuu karkeasti puoliksi kiinteistöjen energiankulutuksesta ja puoliksi matkustamisesta. Olisi hyvä jokaisen toimijan pohtia toimenpiteet ko. päästöjen vähentämiseksi vähintään EU:n ja Pariisin ilmastopimuksen mukaisessa aikataulussa.	1
Innovaatioiden ja ilmastotoiminen rahoituksen potentiaalinen kasvu	1
Kehitetään toimintatavat jakaa oleellista tietoa kustannustehokkaasti (konsulttien ajankäytön näkökulmasta)	0
Osaamisen kehittäminen pitää sitoa osaksi normaalia toimeksiantoa. Laskutus tunti tunnista sisältää "oppitunnit".	0

Työpaja 1: Vaatimukset ja toimenpidesuosituksset, kestävän arvonluonnin kasvattamisen edellytykset, 2/4

Mahdollisuus:	
Kommentin sisältö	Tykkäysten määrä
Tekninen konsultointi keskittyy helposti teknisiin ratkaisuihin. Kyseessä on kuitenkin valtava toiminnallinen ja kulttuurinen muutos, joka tarvitsee konsultointia ja tukea. Parhaimmillaan nivotaan kaikki näkökulmat yhteen: inhimillinen osallisuus, taloudellinen kasvu ja ympäristön edut.	7
Uuden liiketoiminnan kehittämiseen pitää varata erikseen aikaa ja resursseja. Yrityksissä pitää järjestäytyä esim. verkostoihin, joissa kehittämistä buustataan.	7
Kehittyvä yritys vastuusääntely kasvattaa tarvetta olla selvillä toiminnan vaikutuksista ja raportoida niistä. Kasvava liiketoimintamahdollisuus konsulteille.	3
Konsulttipalvelujen hankintamenettely sellaiseksi, että se edesauttaa SKOL:n jäsenyrityksiä tekemään omaa kehitystyötä ja saamaan panostuksen takaisin uusilla toimeksiannoilla.	3
konsulttiyritysten tulee aktiivisesti tarjota hiilijalanjäljen pienentämiseen arviointiin, määrittämiseen ja pienentämiseen liittyviä lisäarvopalveluita asiakkaille koska ainakaan julkisen sektorin asiakkaat eivät ole riittävän nopeasti vaatimusten muodossa asiassa liikkeellä	3
Monet jäsenyritykset ovat enemmän tai vähemmän kiinteä osa kansainvälisiä konserneja - tiivistyvä yhteistyö oman konsernin / yritysryhmän sisällä on oikotie Suomen ulkopuolelle	2
Ymmärrämme taloutta, tiedettä ja tekniikkaa - pärjättävä myös politiikan kanssa, että saadaan ratkaisut toteutukseen saakka	2
Kehitysyhteistyön lisääminen kokonaisratkaisujen toimituksiin. Esimerkiksi päästötön off grid -energiajärjestelmä.	1
Kädenjälkilaskentaa haluavat yhä useammat yritykset. Tarvitaan yhteisesti sovittu laskentamenetelmä, jok asopii myös palveluille.	1
Kokonaiskuvan muodostaminen asiakkaan päästövähennystavoitteiden muodostamisesta ei onnistu ilman laaja-alaista eri alojen konsulttien osaamista (harvalla yrityksellä on omassa yrityksessään läheskään riittävää osaamista). Kokonaiskuvan muodostaminen tulee olemaan haluttua konsulttityötä.	1
SKOL:n yhteistyö kehittyvien markkinoiden saavuttamiseksi, hankkeiden vaatimukset edellyttävät suomalaisten yritysten välistä yhteistyötä	0
ympäristövaikutusten arviointi rahassa edesauttaisi uusien palveluiden kehittämistä ja mahdollisuutta investoida kehittämiseen konsulttiyrityksissä	0

Työpaja 1: Vaatimukset ja toimenpidesuosituksset, kestävän arvonluonnin kasvattamisen edellytykset, 3/4

Uhka:

Kommentin sisältö	Tykkäysten määrä
Keskeisten minimivaatimusten checklista tyyppinen (yhteinen?) työkalu, jonka avulla aina tarkistetaan ettei yhtä ratkaisua tarjoamalla aiheuteta muiden asioiden osalta haittaa (do no harm, vr. esim. taksonomia)	8
Tekninen konsultointi on teknistä. Inhimillinen näkökulma pitää ottaa huomioon vahvemmin. Teemoja ovat esim. hyvinvointi, osallisuus, vaikuttaminen, voimauttaminen.	6
Toimialan oma osaaminen hajautuu - kaikki osaajat eivät pysy mukana muutoksen edellyttämässä tahdissa ja uudista osaamistaan riittävästi. Tatvitaan yhteistyötä oppilaitosten kanssa, jotta sekä tutkintoihin että täydennysoulutukseen on laaja-alainen tarjonta kestävän kehityksen teemoja.	5
Tekoälystä apua trendien tunnistamiseen datasta, mutta huomioitava myös tiedon vääristymät ja näiden havaitsemiseen tarvitaan vielä ihmistä.	5
Käsillä on kolme kriisiä: ilmasto, biodiversiteetti ja jäte. Hyvät ratkaisut ottavat huomioon eri näkökulmat eikä aiheuta ongelmia toiseen "laariin".	5
Ylimääräinen kilpailu ja osaoptimointi sen sijaan, että kokonaiskuvaa tehtäisiin yhteistyössä	4
Kestävän kehityksen ymmärtäminen planetaaristen rajojen näkykulmasta entistä paremmin tarpeellista.	3
Raportoinnista tulee entistä enemmän pakollista, mutta hyödynnetäänkö tietoa oikeasti proaktiivisesti vai onko raportointi vain toteavaa eikä ohjaavaa.	3
Datan hyödyntämisen avain on valita näkökulma: tehokkain on ottaa loppukäyttäjän näkökulma, joka on arkinen ja siihen on kaikkien helppo samaistua. Miten dataa voitaisiin louhia käyttäjän näkökulmasta?	0

Työpaja 1: Vaatimukset ja toimenpidesuosituksset, kestävän arvonluonnin kasvattamisen edellytykset, 4/4

Heikkous	
Kommentin sisältö	Tykkäysten määrä
Tulisiko kehittää kestävän kehityksen pätevyyskysymyksiä? Samaan tapaan kuin on muillakin suunnittelualoilla?	7
Tilajat eivät useinkaan osaa määritellä hankintakriteereitä niin, että kestävän kehityksen eri osa-alueet toteutuisivat. Tässä auttaisi vuoropuhelu konsulttien ja tilaajien kanssa.	6
Sosiaaliset SDG:t (esim. ei nälkää eikä köyhyyttä) ovat melko hyvin toteutuneet Suomessa viime vuosikymmeninä "automaattisesti", olemmeko menettäneet kosketuksen niihin? Näissä pitäisi skarpata, eri haasteet käyvät pitkälti käsi kädessä.	3
Datan jakamisen pelisäännöt saatava selkeiksi sekä hankkeissa (tilaaja-toimittaja - rajapinta) että laajemmin yhteiskunnassa. Pitäisikö KSE päivittää tältä osin?	3
Konsulttien pitäisi pystyä paremmin viestimään asiakkaille kädenjälkimahdollisuudesta - ja saada asiakkaat maksamaan innovatiivisten suunnitteluratkaisujen tuottamisesta!	3
Olisiko mahdollista saada kilpailutusehtoihin/tarjouspyyntöihin jo kirjaus vastuullisuustoimista. Eli yhteistyötä tilaajien kanssa, jotta jo tarjouspyynnöt mahdollistaisivat vastuullisten ehdotusten tekemisen.	3
Saisiko älykkäiden kaupunkien ratkaisuja palastelemalla ideoita pohjaksi miettiä kestävien kylien ratkaisuja? Konseptuomalla kompaktimpi lähestyminen?	1
Osa yritysten päästövähennystavoitteista täytetään pelkästään yhteiskunnallisilla toimenpiteillä, esimerkiksi energiatuotannon päästövähennyksillä. Kokonaisuuden hahmoittaminen on hankalaa, mitä yksittäisen SKOL:n asiakkaan tulee tehdä saavuttaakseen päästövähennystavoitteensa.	0

Työpaja 2: Tulosten viestintä – toimenpiteiden priorisointi ja pääviestit kohderyhmittäin, 1/4

Asiakkaat/tilaajat

Kommentin sisältö	Tykkäysten määrä
Kestävyyden kannalta isoimmat päätökset tehdään hankkeen alussa. Vertaile ratkaisuvaihtoehtoja ja tee valistuneita päätöksiä tietoon perustuen.	6
Suunnitteluvaiheessa ratkaistaan 80 % hankkeen elikaaren aikaista ympäristövaikutuksista ja kustannuksista.	4
Konsultti on apunasi kestävän kehityksen tavoitteiden tunnistamisessa ja saavuttamisessa.	4
Ota meidät mukaan oman organisaatiosi keskusteluun kestävydestä. Älä odota konkreettisen hankkeen suunnitteluun saakka.	4
Konsultti auttaa löytämään asiakkaalle sopivimmat keinot kestäväille kehitykselle alan uusimpien ratkaisujen joukosta.	3
Jatkaen alla jo mainittua: kestävyden luominen lähtee jo vaiheesta ennen hankesuunnittelun alkamista, viimeistään siitä tarvitaanko koko hanketta ylipäätään. Käytä suunnitteluosaamista ajoissa.	3
Yhteistyö ja kumppanuus ovat avian onnistuneisiin hankkeisiin.	2
Tuomme esille vaihtoehtot ja niiden kestävyysvaikutukset	1
Aihepiirin moniulotteisuutta tulee korostaa ja saada asiakkaat ymmärtämään, että tämä aihepiiri vaatii laajaa osaamista, jota kappas vaan SKOL jäsenyrityksineen tarjoaa.	1
Kestävän kehityksen avulla säätyy kustannuksia, laatu paranee ja ympäristö kiittää.	1
Konsulttiyritykset tekevät SKOL:n johdolla paljon työtä kehittääkseen tähän liittyvää osaamista ja palveluja.	0
Voit saavuttaa itse asettamasi ja markkinoiden sinulle asettamat kestävyystavoitteet vain kokonaisvaltaisen suunnittelun avulla - tarvitset osaavan konsultin	0
Maaailma monimutkaistuu, ratkaistaan haasteet yhdessä.	0
Kädenjäljestä käsitystä kestävydestä!	0

Työpaja 2: Tulosten viestintä – toimenpiteiden priorisointi ja pääviestit kohderyhmittäin, 2/4

Suuri yleisö

Kommentin sisältö	Tykkäysten määrä
Suunnittelu- ja konsultointiala on avainroolissa kestävän kehityksen haasteiden ratkaisijana.	3
Suuri yleisö/ omaa alaansa etsivät: Suunnittelualalla vaikutat konkreettisesti kestävämpään tulevaisuuteen	3
Alan houkuttelevuuden korostaminen, jotta saadaan osajia enemmän ja toisaaalta nostettua entisestään tämän aihepiirin tärkeyttä ja sen osajia.	3
Suunnittelijana ja konsulttina pääset jättämään kestävän kädenjälkesi	3
Työmme ei ole vain "harmaata insinööryötä", suunnitteluala rakentaa koko yhteiskuntaa (samalla: osajien kirjoa pitäisi täydentää, ihmistieteiden ja mm. ekologian osaamista kaivataan koko ajan enemmän)	2
Sitoudumme suunnittelemaan parempaa elinympäristöä itsellemme ja tuleville polville	1
Edellisestä ponnistaen: Pidämme huolta huomisesta.	1
Yhteistyö on kaiken a ja o: vain yhdessä voimme saavuttaa 1,5 asteen lämpenemisen tavoitteen.	0
Oikein rakentaminen ratkaisee kaiken!	0
Suunnittelemme kestävää tulevaisuutta ja teemme visioista totta.	0

Työpaja 2: Tulosten viestintä – toimenpiteiden priorisointi ja pääviestit kohderyhmittäin, 3/4

Päättäjät:

Kommentin sisältö	Tykkäysten määrä
Ympäristövaatimukset osaksi hankintojen vertailuperusteita	4
Ilmastotyön tärkeyttä hiukkaakaan vähättelemättä, nyt on jo aika laajentaa muihinkin kestävyiden vaatimuksiin. Koko paletti on otettava tosissaan NYT. Onneksi konsultti auttaa.	4
Nykyinen villi pelikenttä (raflaava viesti) tarvitsee säätelyä, chekkilistoja, pätevyitymisiä ym. jotta laatu on riittävä ja tähtää oikeisiin päämääriin.	4
Konsultit apuna tietoa tuomassa päätöksenteon tueksi	3
Säätelyllä voidaan vauhdittaa kestävä kehityksen tavoitteiden saavuttamista ja markkinoiden syntyä kestäville ratkaisuille.	2
Planeetan elinkelpoisuutta koskevat ratkaisut eivät voi olla politiikan pelikenttiä - aidosti tietoon pohjautuva päätöksenteko on välttämätöntä	2
Ei nahoilleen kilpailutusta enää. Muuten emme kykene kestäviin ratkaisuihin pitkässä juoksussa.	2
Konsulttiyrityksillä on keskeinen rooli asiassa.	0

Työpaja 2: Tulosten viestintä – toimenpiteiden priorisointi ja pääviestit kohderyhmittäin, 4/4

Alan yritykset

Kommentin sisältö	Vastauksen sisältö	Tykkäysten määrä
Meillä on mahdollisuus ottaa johtotähden paikka asiassa jonka omistajuutta ei tunnu ottavan itselleen mikään taho		5
Yhdessä voimme mahdollistaa kokonaisvaltaisen kestävyuden		3
Asiantuntijoiden pitää panostaa osaamisen päivittämiseen. Kestävä kehitys tuo uusia vaatimuksia jokaisen työkuvaan.		3
Olemme alana sitoutuneet hiilineutraaliuteen vuoteen 2035 mennessä.		2
	Juuri näin, olisi varmasti mahdollista jos ja kun fokus scope 1 & 2 tasoissa ja jäännöspäästöjen kompensointi on mahdollista.	1
	minusta ainakin oman jalanjäljen osalta pitäisi olla aiemmin	0
Voimien yhdistäminen ensiarvoisen tärkeää vaikutusten luomiseksi		2
Alan profiilin nosto tapahtuu yhetistyössä osaamisestamme kertoen.		2
Tätä haastetta ei kukaan taklaa yksin. Yhteistyössä on meidän paras voima!		2
Me kaikki eli jokaisen suunnittelualan jokainen suunnittelija ja konsultti olemme rakentamassa kestäväää kehitystä jokaisessa toimeksiannossa. Tämä vastuu ja mahdollisuus täytyy jokaisen ymmärtää. Kaikkea ei tarvitse osata itse, mutta pitää hahmottaa että siinä kentässä toimitaan.		1
Toimimme vastuullisesti ja pidämme huolta omasta osaamisestamme.		1
Meillä on suuri ilmastokädenjälki.		0
Kannustaminen mahdollisiin tuleviin pätevöitymisiin, yhteistyöhön muiden toimijoiden kanssa.		0