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# 1. RECAP: THE PROJECT GOALS



# Project goals

1. Create an understanding of how the various industries represented within Palta impact the world around them within the dimensions of the environment, health, society, and knowledge
2. Help Palta utilize net impact data and thinking in the development of its own activities (incl. strategy, marketing & sustainability work)
3. Help Palta's member organizations utilize net impact data and thinking in developing their businesses (incl. strategy, marketing & sustainability work)

## 2. METHODOLOGY: HOW WAS THE ANALYSIS CONDUCTED?



# Upright in brief

## WHO WE ARE

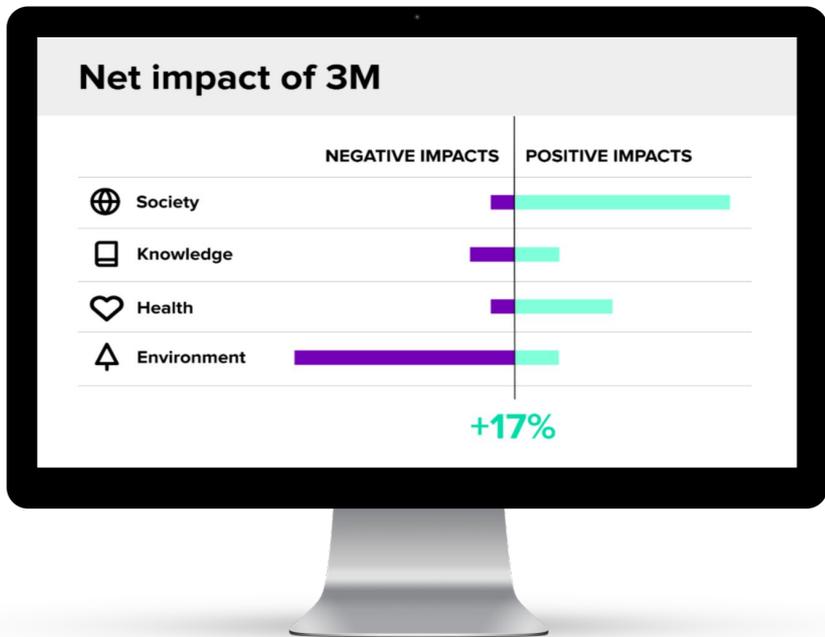
- A Helsinki-based technology company founded in 2017
- Major R&D focus on the **net impact model** during the first years
- Currently serving **150+ clients** globally

## WHAT WE DO

- We **quantify the net impact of companies**, with the overall aim to incentivize companies to optimize their net impact
- Compared to more traditional ESG metrics, we focus on measuring the **impact of the core business** of a company
- Our model is based on a neural network summarizing **200M+ scientific articles** and our proprietary modelling of the economy with a **taxonomy of 150,000+ possible product categories**

# Upright's mission is to create incentives for companies to optimize their net impact

Upright pursues its mission by 1) creating comparable data about companies' net impact...



...and 2) building ways for companies' key stakeholders to use the data in their decision-making

## INVESTORS



"Where do I dedicate my equity i.e. which company do I **invest** in?"

## CUSTOMERS



"Where do I dedicate my money i.e. which company do I **buy** from?"

## EMPLOYEES



"Where do I dedicate my time i.e. which company do I **work** for?"

## LEADERSHIP



"Which **strategic decisions** help us constantly improve our impact?"

# The current impact discourse lacks analytical rigour, comparability and sense of scale

The current impact discourse is...	Example	...which leads to:	How the Upright Net Impact Model addresses the problem:
Stuck at minimizing downsides	<i>"We aim to reduce our CO2 emissions by 10 percent"</i>	Not understanding what the resources are used for	Measure both negative and positive impacts of companies
Confusing big and small things in a colourful mess	<i>"We are now using recycled office paper"</i>	Big things get overshadowed by masses of secondary details	Build a macro model that reveals scale of impact
Focused on internal impacts	<i>"We installed solar panels on the roof of our HQ"</i>	Majority of significant impacts in downstream or upstream are overlooked or completely missed	Model whole value chain
Confusing compliance practices with impact	<i>"We signed the UN Global Compact"</i>	Tobacco companies get nice ESG scores	Model companies via their core business (products + services)

# How does the Upright net impact model work?



**1. An unprecedented value chain simulation of the global private sector**



a graph of all products and services traded in global markets + value chain relations + market sizings + product family relations



**2. A science-based, comparable impact modeling for all products in the graph**



net impact profiles for all products



**3. A mapping of companies to the product graph**



net impact quantifications for companies



**4. Company disclosure database**



sanity-checking against companies' own disclosures + complementing data

# The Upright model compiles information from publicly available sources to form comparable net impact profiles of companies

Every company uses resources (-) and exists to create some positive value (+) with them: the Upright net impact model helps to understand the net sum of these costs and gains.

The Upright net impact model considers 19 impact categories in 4 dimensions (Society, Knowledge, Health, Environment).

Key design criteria of the Upright net impact model include:

- **Measure net:** The model must consider both costs and gains, and provide their net sum.
- **Comprehensiveness:** The model must consider all types of costs and gains
- **Whole value chain:** The model must capture the cost and benefits created in the whole value chain of a company
- **Comparability:** All estimated costs and benefits produced by the model must be comparable

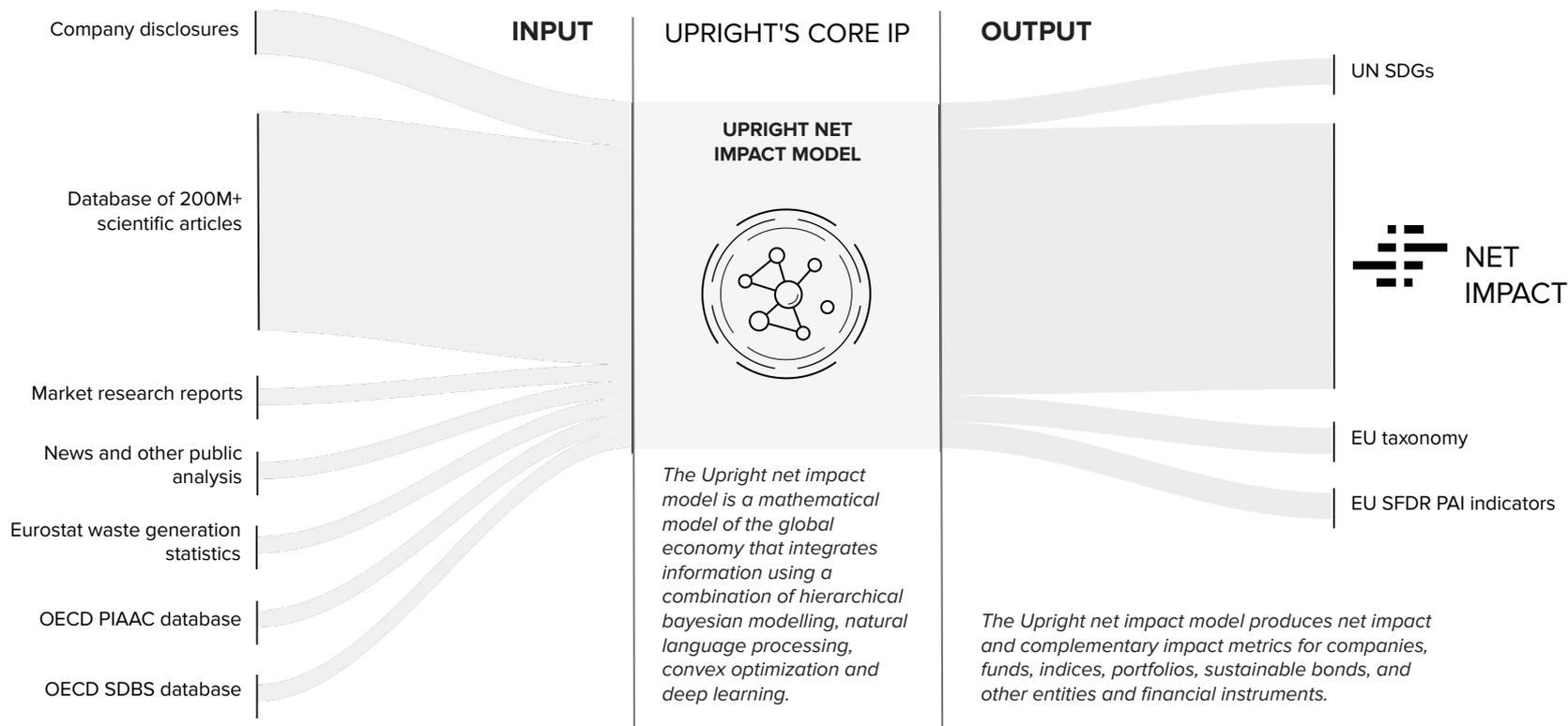


# Net impact ratio is similar to net profit ratio

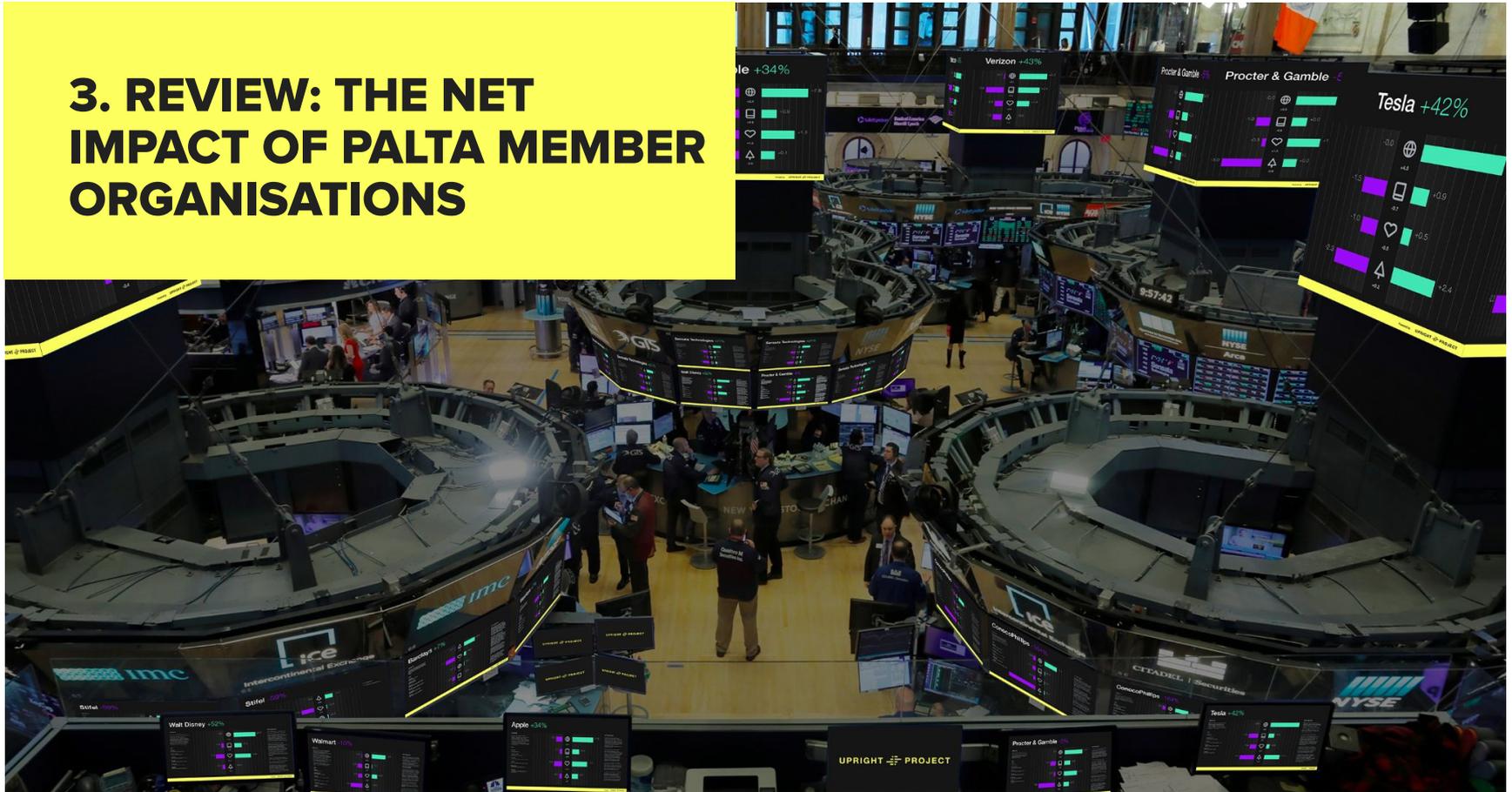
$$\text{net } \textit{impact} \text{ ratio} = \frac{\text{positive impacts} - \text{negative impacts}}{\text{positive impacts}}$$

$$\text{net } \textit{profit} \text{ ratio} = \frac{\text{revenue} - \text{costs}}{\text{revenue}}$$

# Key data inputs for the model include scientific literature, public databases & statistics, and company disclosures



### 3. REVIEW: THE NET IMPACT OF PALTA MEMBER ORGANISATIONS



# The scope of the analysis: 62 Palta member organisations (1/3)

## Care and maintenance (“Tekniset palvelut”)

- Enersense
- Are
- Voimatel
- Eltel Networks
- GA Telesis Engine Services
- Caverion Suomi

## Business and specialist services (“Yritys- ja asiantuntijapalvelut”)

- VTT
- Azets Insight
- Kreab
- Inspecta Tarkastus
- Visma Consulting
- Fintraffic
- Ark-byroo
- Endev
- Kantar TNS

## Administrative and support services (“Hallinto- ja tukipalvelut”)

- Verisure
- Avarn Security
- Eilakaisla
- Adecco Finland
- Eezy
- VAV Asunnot
- Suomen Asiakastieto
- Senaatti-kiinteistöt
- Lowell
- Kojamo
- Aurinkomatkat

# The scope of the analysis: 62 Palta member organisations (2/3)

## Information and communications

(“Informaatio ja viestintä”)

- Yleisradio
- Cinia
- Digita
- MTV
- DNA
- Telia Finland
- Suomen Erillisverkot
- Elisa
- Finnkino

## Entertainments and leisure

(“Viihde ja virkistys”)

- Palloliitto
- Tiedekeskus Heureka
- Veikkaus

## Logistics

(“Liikenne ja logistiikka”)

- VR-Yhtymä
- Muuttohaukat
- Suomen Transval
- Steveco
- Posti
- Helsingin Satama
- Arctia Meritaito
- Finnpiilot Pilotage
- Viking Line
- Finavia

# The scope of the analysis: 62 Palta member organisations (3/3)

- Schenker
- Beweship
- Varova
- NTG Polar Road
- Kuehne + Nagel
- Tallink Silja
- Finnair

## Other sectors ("Muut toimialat")

- M Room
- NRC Group Finland
- Grano
- Metsähallitus Metsätalous
- Suomen Euromaster
- Alko

# The aggregate net impact profile of Palta's member organisations\*

As a group, Palta's member organisations stand out net positive



Essentially all of Palta's member organisations have a significant positive impact on society through **employment** offered and **taxes** paid. Many also contribute to societal infrastructure ie. the basic infrastructure needed to keep our modern society running.



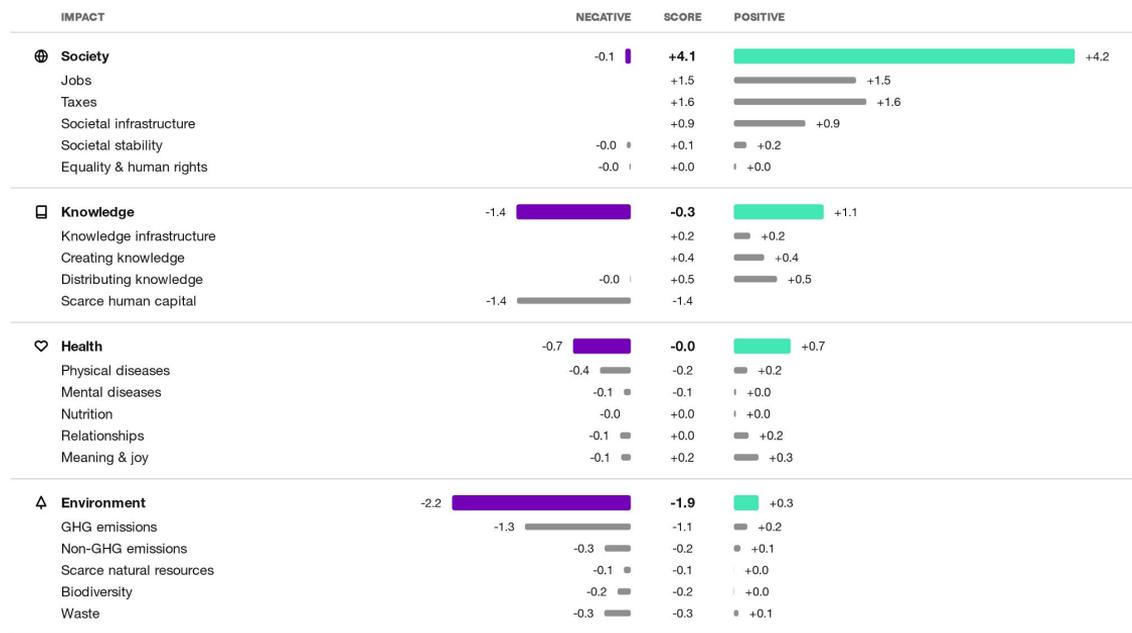
Within the knowledge dimension lies one of the most important resources for the organisations: **scarce human capital**. This impact reflects the opportunity cost of scarcely available human capital. On the positive side, media, telecommunications and professional services companies in particular help build and maintain **knowledge infrastructure**, take part in **knowledge creation** and **distribute** new **knowledge**.



Health impacts here are largely driven by the **sedentary** nature of consuming the media or entertainment products and services offered by some members. Many of these same companies also impact health positively, particularly through increased **social health** and **enjoyment**.



All organisations produce some emissions and waste. In the case of Palta's members, most of these impacts stem from the companies in the **traffic** and **logistics** sector. Low carbon solutions from the same industries impact positively on the other side of this dimension.



Upright model version 0.3.790  
on 29th Mar. 2022 at 13:54 GMT

**+30%**

**Net impact ratio**  
Value set: Equal weights

\* This is an "equally weighted" group, in which all companies and groups are given the same weight. This analysis aims at showcasing the range of impacts within the group.

# Comparison: industry groups

Palta's member organisations produce a wide range of impacts throughout the categories - with a substantial positive impact on employment and taxes paid as a common feature between industries



Within the dimension of **society**, all industry groups have a significant positive contribution through jobs and taxes. Real estate services that provide us with homes and offices and logistics services that help move goods and people around efficiently contribute the most within societal infrastructure.

Entertainment and leisure as well as information and communications services create the most of both positive and negative **health** impacts. As may be expected, logistics services create the lion's share of the negative **environmental** impacts.

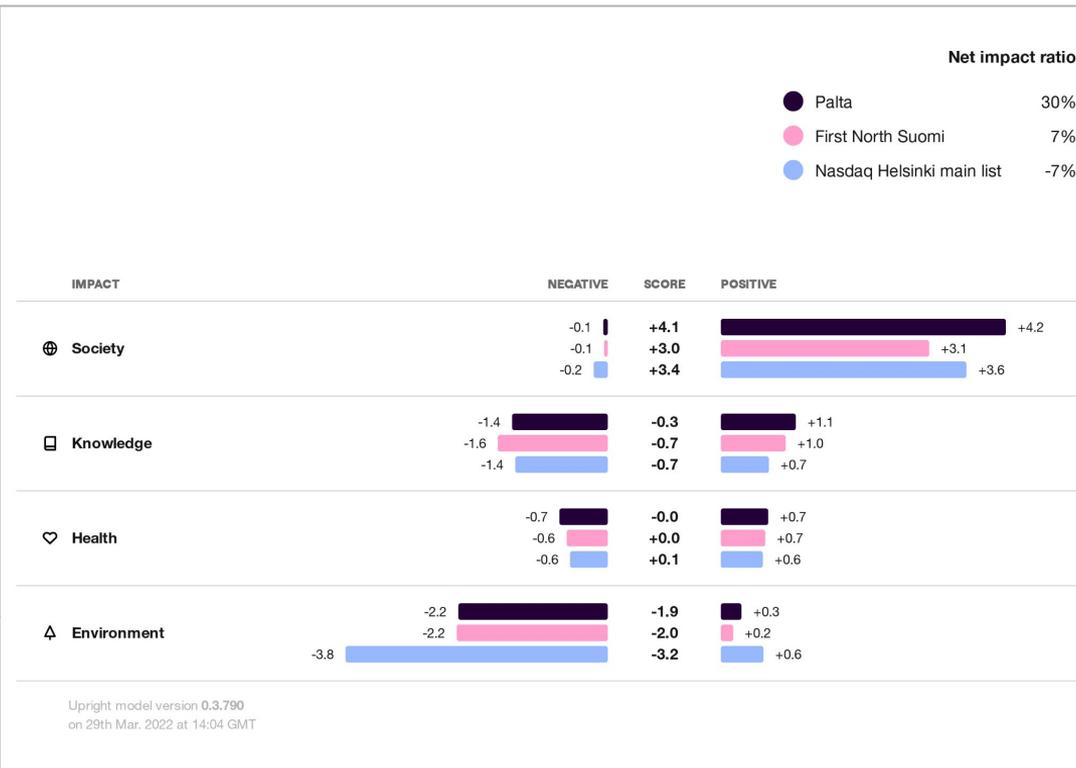
While the industry division brings out certain impact archetypes, industry is not the defining factor for impact. Diving into individual industries reveals differences within as well (see industry materials further on).

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# Comparison: Palta members & stock-listed companies

Palta's member organisations utilize more scarce human resources, but far fewer environmental ones, and manage to create larger or equal positive impact in most categories

The Nasdaq Helsinki main list contains many firms that operate in highly **emissions intensive** businesses such as non-renewable energy, transportation, and manufacturing.



Both Palta members and the stock-listed companies represent a cross-section of Finnish business its industries - which makes their impact profiles relatively similar.

The net impact ratios are however, distinct, and Palta's member stand out slightly more positively. This is largely due to the higher positive impact on **society**. As a large employer, the service sector stands out with a large positive impact on employment and taxes.

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**Deep dive into different industry groups**

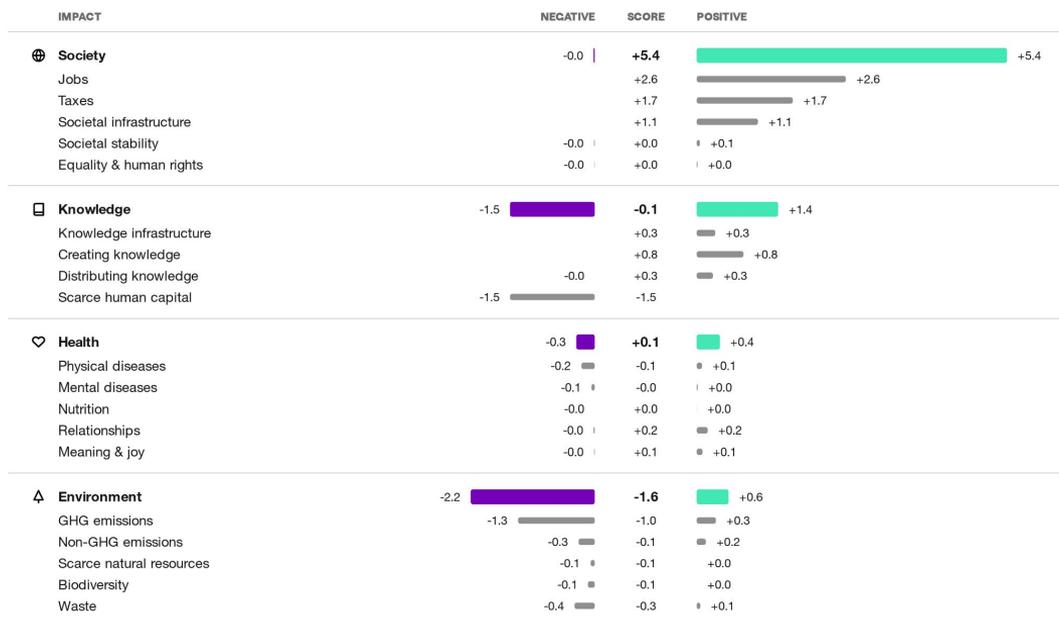


# Net impact profile of the care and maintenance industry

These organisations, on average, utilize environmental resources but balance it out with a large positive impact on societal infrastructure

Much of the environmental footprint within this group stems from the downstream, ie. the types of products and services that are being enabled and supported through maintenance. Examples of this include **aircraft leasing and maintenance** (GA Telesis Engine Services), **management consulting for the construction industry** (Caverion), and provision of **electric power transmission lines and traffic lights** (Eltel Networks and Voimatel). These impacts move up the value chain and Palta's member organisations are also allocated their share.

The same logic applies with the positive impacts as well - as Caverion's and Are's services contribute towards **energy efficient buildings**, they are allocated a portion of the impact stemming from saved resources.



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**+49%**

**Net impact ratio**  
Value set: Equal weights

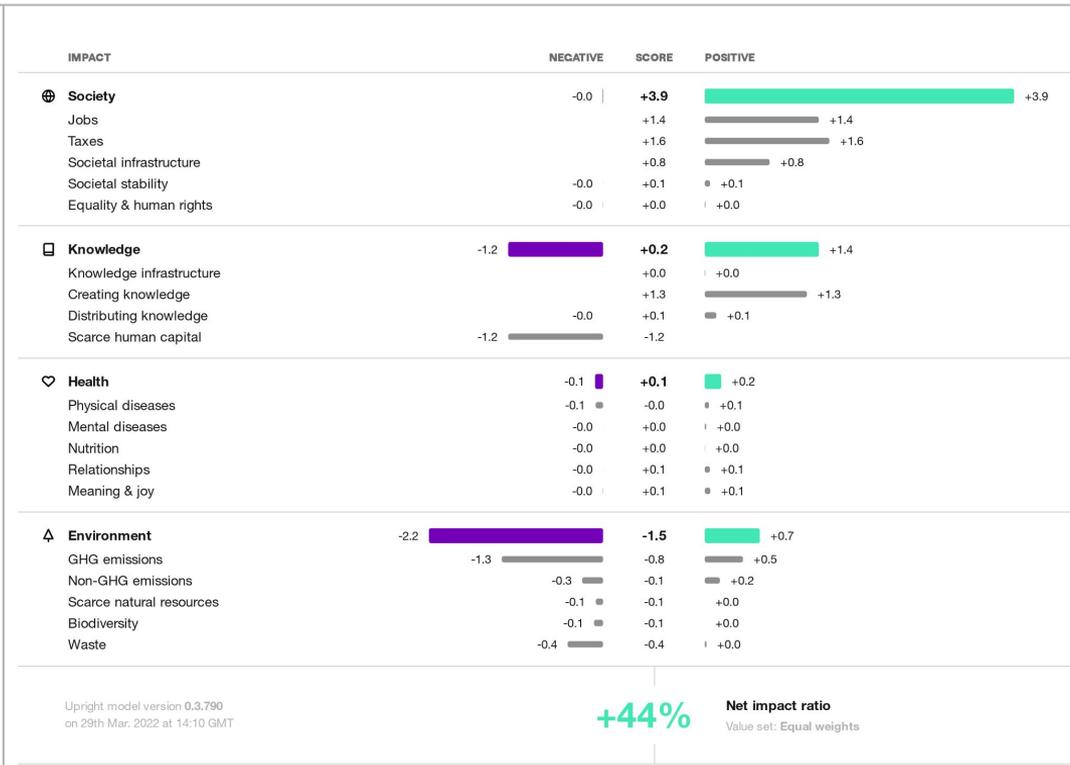
Essentially all of these companies have a positive impact on societal infrastructure. Both **construction engineering** as well as **electrical powerline maintenance**, which make up the bulk of the services in this group, are needed for an efficient society.

In addition to society, these companies contribute to knowledge widely. Are's **construction engineering services**, for example, generate knowledge, Caverion's **management consulting services** distribute knowledge and Voimatel's **telecommunication network maintenance services** enable knowledge infrastructure.

# Example company profile: construction services company from the care and maintenance industry group

Company stands out with positive impacts on society, knowledge, and the environment

Construction creates **emissions** and generates **waste**.



Through constructing and enabling the construction of buildings, the company contributes to **societal infrastructure**, i.e. the basic infrastructure society needs to function.

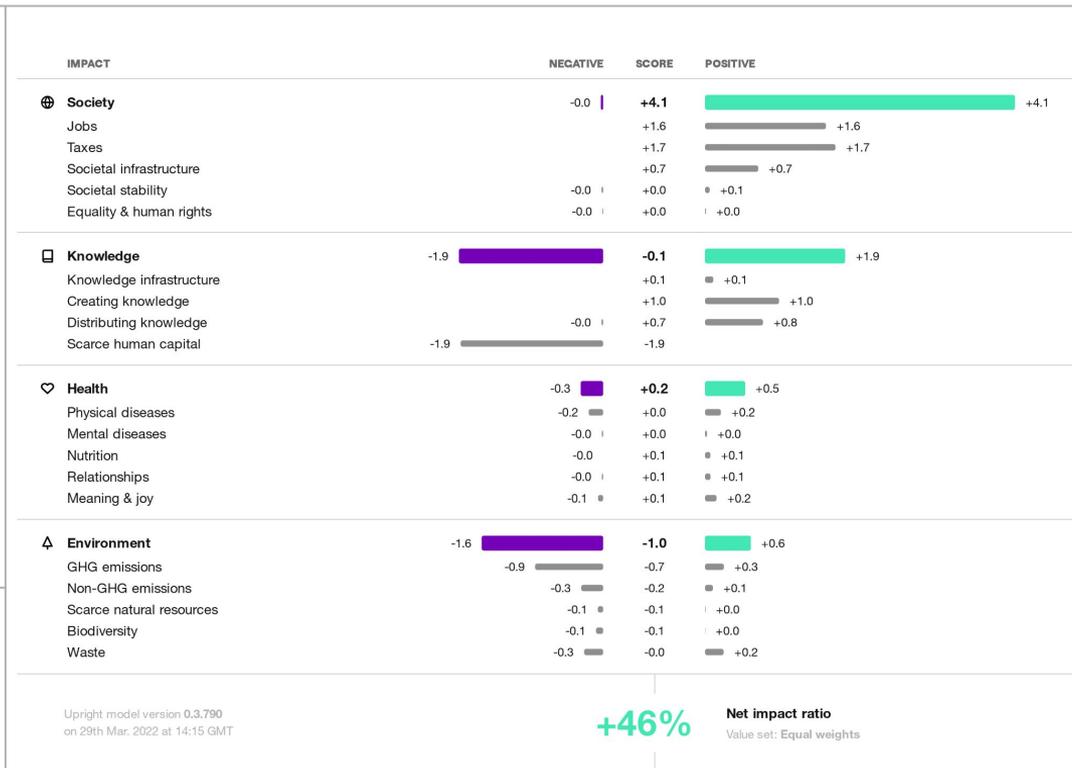
The company makes a significant positive contribution with its **engineering services** that generate **new knowledge**.

**Renovation** and **modernisation** services help reduce needed resources and lifetime emissions for buildings.

# Net impact profile of the **business and specialist services industry**

The defining feature of this group is that its impact is strongly defined by the clientele of the organisations

Few professional services companies have a high environmental impact through their own activities. Most of this impact stems from the **clientele** and the **industries served**. Examples include Fintraffic, which supports aviation travel, and Ark-byroo, which enables construction works. Focusing on shaping their clientele is a way for these organisations to develop their impact over time.



All of the services represented in this group help create or distribute knowledge - be it **research, communications consulting, IT support, architectural services or bookkeeping.**

However, most of the other impacts stem from the customers and their businesses. These services, supporting the healthcare or renewable energy industries for example, have positive impacts on health and the environment respectively.

# Example drilldown: the client industry largely defines the impact of professional services

Customer analytics services inherit both positive and negative impacts from the client it serves, resulting in highly varied impact profiles

Net impact ratio

- Customer analytics services for the agricultural industry 46%
- Customer analytics services for the communication industry 46%
- Customer analytics services for the automotive industry -21%

Customer analytics as such has a positive impact on **knowledge**. Thus all the different types of customer analytics stand out as positive knowledge creators.

However, as much of the impact of customer analytics stem from the **downstream** ie. the impacts created when the customer analytics insight is put into use, other impacts are largely defined by the impact of the industry it serves. The agricultural industry creates food with a positive impact on health, while the communications industry creates and spreads knowledge. The automotive industry produces more emissions but allows for people and goods to move around, contributing to societal infrastructure. Palta's professional services companies play a part in all these impacts depending on their clientele.

IMPACT

NEGATIVE

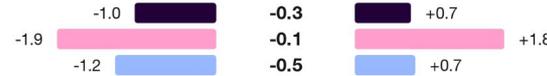
SCORE

POSITIVE

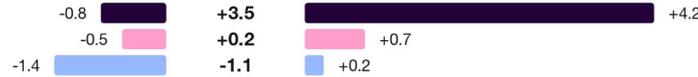
⊕ Society



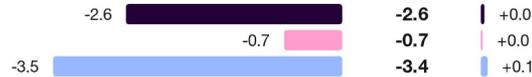
📖 Knowledge



♥ Health



⚠ Environment



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on 29th Mar. 2022 at 09:17 GMT

# Example company profile: market research company from the business and specialist services industry group

This profile epitomizes the impact of many professional services companies: the greatest impact is the generation of new information, but the impact also includes what the information is utilized for

The example company offers its services to the industries shown in the previous slide

Unsurprisingly, the greatest impact of the company is the **distribution of knowledge** to its customers, but with the opportunity cost of employing highly educated people.

The impacts of the company's services are also characterized by the activities they support. Services for the emission-intensive area of **automotive industry** contribute the most to the company's negative environmental impact.



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on 29th Mar. 2022 at 09:20 GMT

**+21%** Net impact ratio  
Value set: Equal weights

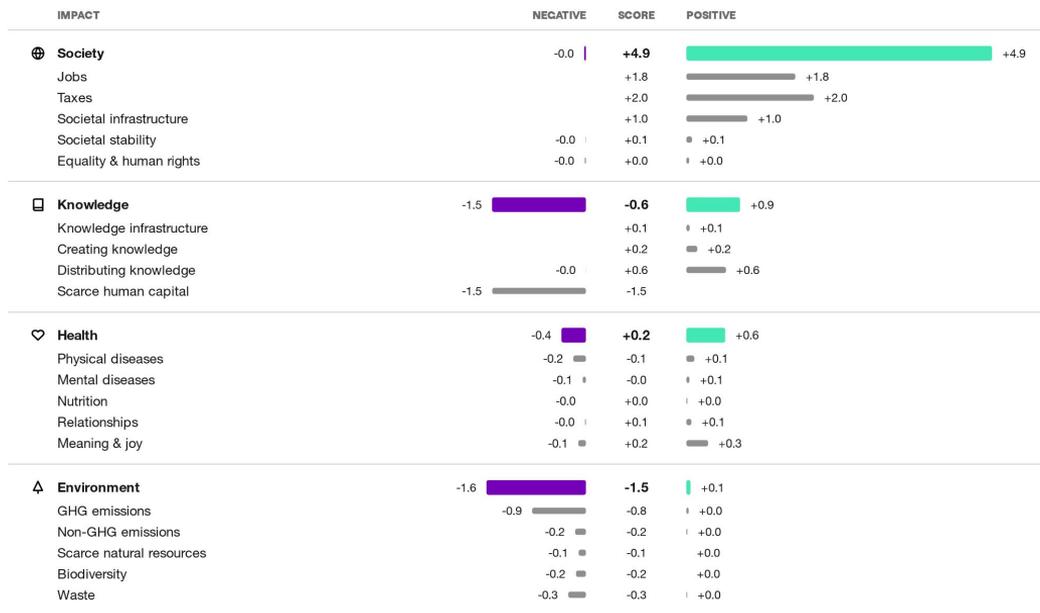
Similar to other service sector companies, this company has a highly positive impact on society from **taxes paid** and people **employed**.

The company serves the **communication** and **agricultural** industries which have a positive impact on health.

# Net impact profile of the administrative and support services industry

Real estate, home security & HR services define this group's impact, particularly through a positive impact on societal infrastructure and knowledge distribution

All of Palta's member organisations create some emissions. Here, the largest footprints are created by **travel agency services** (Aurinkomatkat) and **real-estate related services** (Kojamo, SATO etc).



Upright model version 0.3.790  
on 29th Mar, 2022 at 14:17 GMT

**+45%**

**Net impact ratio**  
Value set: Equal weights

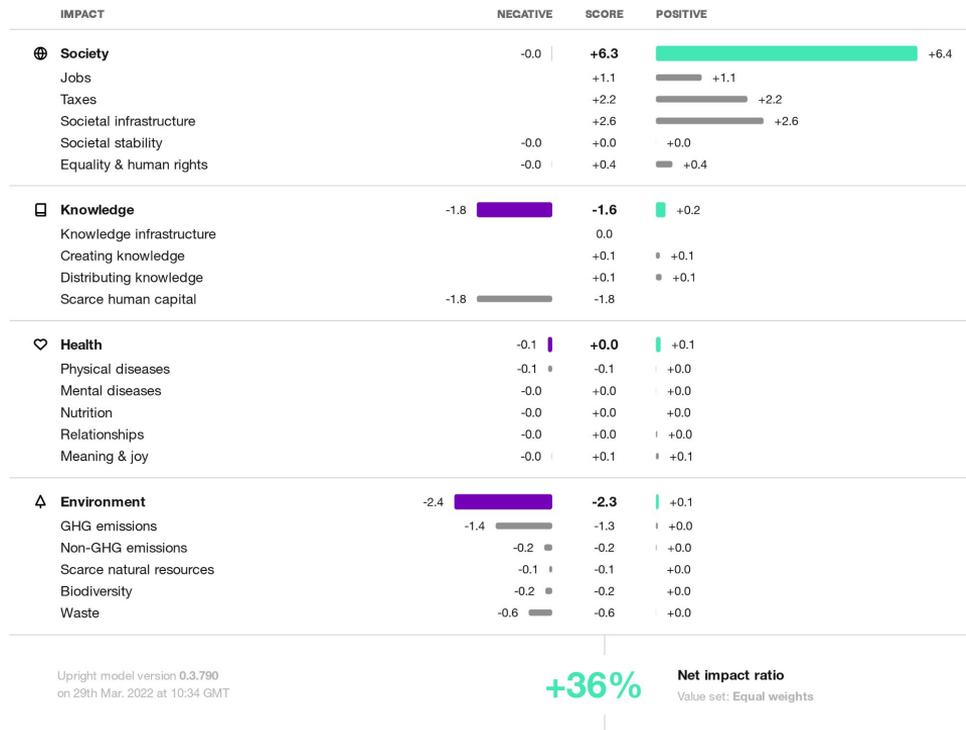
Right after the logistics companies, this group has the second largest positive impact on **societal infrastructure**. This stems from the fact that the two main services represented in the group - housing and home security - both find their most significant contribution to the world around them is through the societal infrastructure impact.

The **HR & employment** services offered by the likes of Eilakaisla, Eezy and Adecco are the main source of positive knowledge impacts - helping to share knowledge about new positions and match the right people with them.

# Example company profile: housing services company from the administrative and support services industry group

The company provides societal infrastructure by offering homes, but in a more equitable manner

**Apartments** have a significant environmental impact due to the construction of the buildings as well as the energy required for electricity and heating.



**Apartment renting services** provide people with living spaces, which contributes positively towards societal infrastructure. Furthermore, the company provides **low-income housing** which has a favorable impact on equal housing opportunities.

# Net impact profile of the information and communications industry

This group determines most of the health impacts present within the analysed Palta members

The health impact of services such as **movie theater services** (offered by Finnkino), **streaming services** (by Elisa, Telia and Yle) or **operator services** (Telia and Elisa) are two-sided: they increase feelings of meaning & joy and enhance relationships through providing entertainment and the opportunity to stay in touch with loved ones, but they also encourage sedentary lifestyles, which have a harmful impact on physical health.

Most of the products and services offered by the companies within this group have a relatively **small environmental footprint**. Most of the emissions stem from the production of electricity needed to power the information and communications services.



These companies are the only ones in the group of analysed organisations that impact societal stability positively. **News creation and broadcasting services** by organisations like Yle, MTV and Digita disseminate fact-based information, which helps create a shared reality between people. In addition to news, **cyber security services** such as the ones provided by Cinia and Digita also contribute positively towards a stable society through increased systems security.

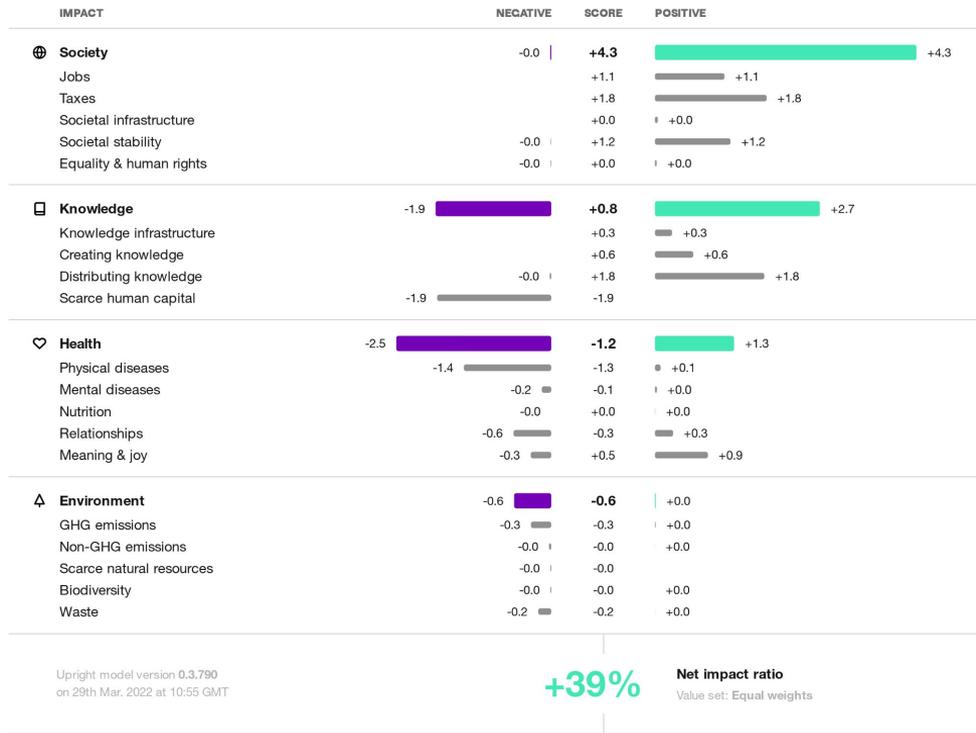
# Example company profile: media company from the information and communications industry group

The type of media content produced and broadcasted determines the types of impacts seen in the categories of society, health and knowledge

Consuming content such as **movies** or **comedy shows** adds meaning and joy to people's lives.

**Sports content**, in particular, has a favorable effect on relationships by enhancing a sense of community.

On the other hand, watching television promotes **sedentary behaviour**, which has a negative effect on people's physical health.



The company contributes positively by creating new knowledge and distributing it through its **broadcasting** services.

In addition, news content increases societal stability by increasing a fact-based understanding of society.

# Net impact profile of the entertainment and leisure industry

The impacts of various recreational activities stand out within the health and knowledge categories

While **Veikkaus'** gambling services can increase feelings of meaning and joy, due to their addictive nature they also have a wide-ranging negative influence on people's health affecting relationships and mental health.

Entertainment and leisure organisations have only a modest impact on the environment.



Upright model version 0.3.790  
on 29th Mar. 2022 at 14:24 GMT

**+32%**

**Net impact ratio**  
Value set: Equal weights

**Palloliitto** promotes youth football activities that benefit **societal stability** by offering hobbies, while professional sports foster social cohesiveness.

**Heureka** has a large positive impact on **distributing knowledge** via science center services and educational games.

NB: The Upright model has been designed to measure the impact of companies. Because of this, the net impact profile of Palloliitto is not fully comparable to company profiles. Also, the Upright model is currently unable to take into account the positive impacts Veikkaus has through the financing of non-profits.

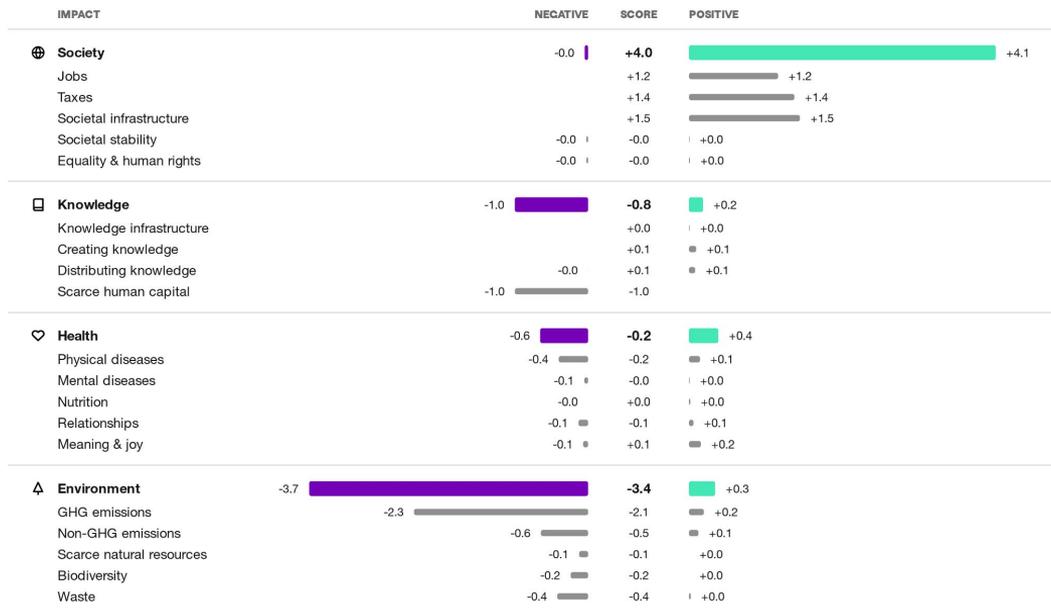
# Net impact profile of the **logistics** industry

Transportation and logistics is an energy-intensive industry that converts environmental resources into societal infrastructure

All logistics organisations create **traffic**, which has a negative impact on health due to accidents and pollutants affecting the quality of the air.

Furthermore, Tallink Silja and Viking Line make a significant portion of revenue through the retail of alcohol on their cruise ships, which has negative health impacts.

All organisations in this group have a negative impact on the environment. The **method of transport** determines the size of the impact.



Upright model version 0.3.790  
on 29th Mar. 2022 at 14:25 GMT

**-7%**

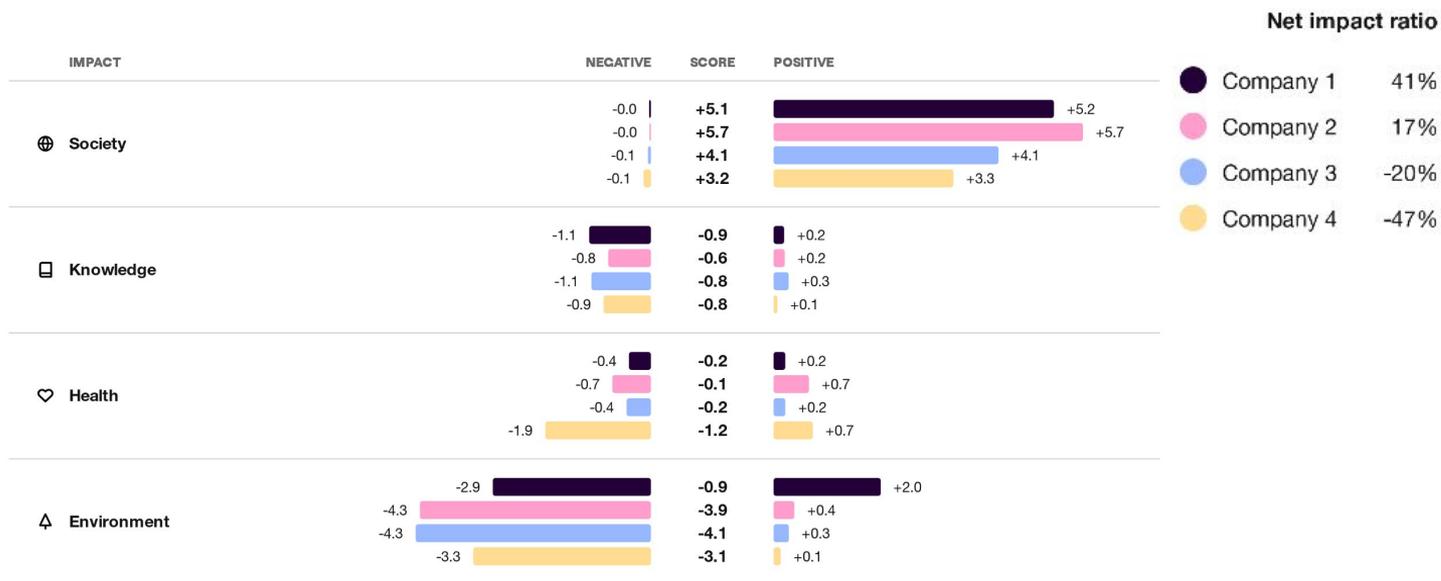
**Net impact ratio**  
Value set: Equal weights

**Transportation of cargo and passengers** is considered an important component of modern infrastructure that is required for society to function.

Some companies within the group have a positive impact on the environment through the focus on lower-emission alternative modes, such as **rail transport** (VR-Yhtymä), or **electric cars** (Posti)

# Comparison: select logistics companies

Impact differences in transportation are greatly influenced by the method of transportation



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on 29th Mar. 2022 at 16:29 GMT

The major positive impact of all these companies is societal. In addition to **employment** creation and the **tax footprint**, all of these enterprises provide **essential societal infrastructure** through transportation and logistical services.

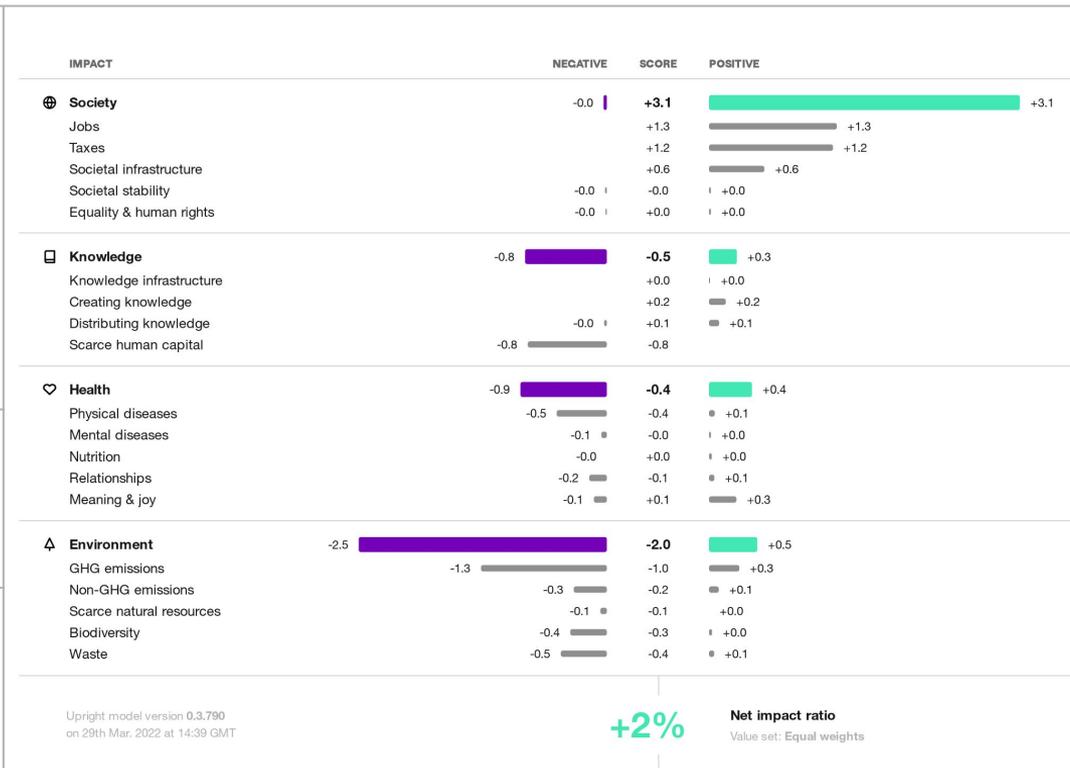
The environmental impact is however, defined by the methods used for transportation. When compared to **electric rail travel services** (Company 1), passenger **vehicles and trucks** (Company 2), **cruise ferry** (Company 3) and **air or ship freight transport services** (Company 3) have a higher environmental impact per euro generated.

# Net impact profile of other industries

The wide range of services provided by these member organisations leads to a more varied aggregate impact profile with no clear defining impact drivers on the group level

Alcohol is a significant driver of negative health impacts here. The **retail of alcohol** by **Alko** has a harmful impact not only on physical health, but also on social and mental aspects of health. Alcoholic beverages do however, also show up as a small positive impact within meaning & joy as well.

All organisations create some emissions. Here, the largest footprints are created by **retail of rubber tyres** (eg. Euromaster), **railway construction and maintenance** (NRC Group), and **forest harvesting** (Metsähallitus Metsätalous).



The greatest positive impacts can be seen in the area of society, which stems from taxes and jobs. In addition, NRC Group contributes to societal infrastructure by **constructing and maintaining railways**.

# 4. KEY TAKEAWAYS AND DISCUSSION



# Summary & key messages

1. **Palta's member organisation base - as a whole - is highly net positive.** The organisations manage to create a wide range of positive impact with a relatively limited use of resources, resulting in a net positive aggregate profile.
  - a. The separate industries are also, all either net positive or roughly net neutral on their own
  
2. The organisations create a range of positive impacts worth highlighting
  - a. One of the most significant positive impacts that is common to all the companies is their role as **employers** and **taxpayers**, confirming existing analysis and messages about the service industries
  - b. Many organisations, in particular logistics companies, make significant contributions towards **societal infrastructure**. This impact brings a new perspective to the conversation on logistics-related sustainability issues often focused on heavily on environmental footprints.
  - c. A range of different industries from engineering, consulting, bookkeeping, to research and HR, have a highly positive impact on **knowledge**. This in particular, is a metric often foregone in traditional ESG metrics.
  - d. The most significant positive health impacts of the group are created by companies not within the healthcare sector - but rather **entertainment** and **media**. These companies have a positive impact on health through increased enjoyment - a significant component of overall health.
  - e. Environmental resources are the single largest resource used by these companies as a whole. But - the lion's share of emissions stem from a select group of companies, namely logistics and construction. Understanding the source of these impacts can help focus efforts where they can make the most difference.
  
3. **While the split between industries allows for certain impact archetypes to emerge, industry does not determine impact per se.** Rather, the products and services ie. the core business does. For example, within professional services, the clientele and the associated downstream impacts shape the profile much more, and within logistics firms, the mode of transport plays a significant part. In terms of communications efforts and helping companies understand and develop their impact over time, many of the strengths of net impact analysis are unlocked when looking at individual firms.

