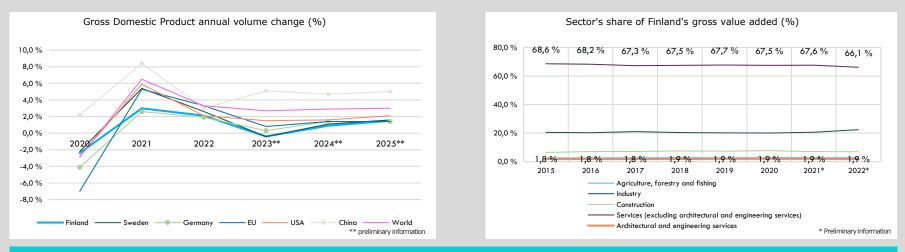
# New foresight tool for companies in the consulting industry

Executive summary 13.10.2023

# **Gross Domestic Product**

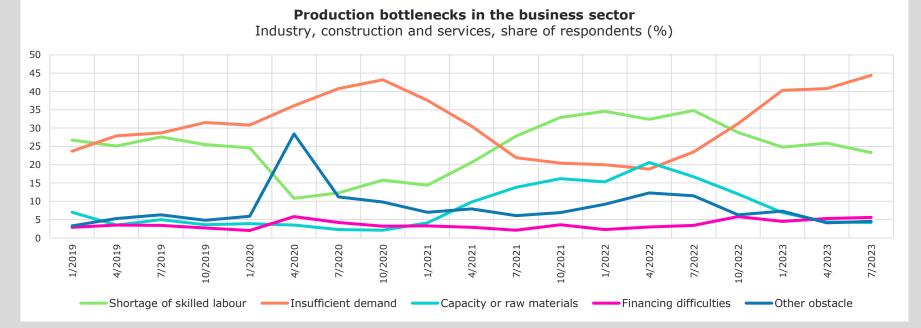
## Finland's stagnant economic growth is predicted to pick up as inflation slows down and new investments accelerate growth

According to the most recent forecasts, Finland's GDP is turning to growth in 2024. Gross value added is created especially in the service business, although in recent years the share of service sectors in the total has shrunk while the amount of value added in industrial activity has increased. At the same time, the share of the value added in the planning and consulting sector has increased.



View: Finland's economy and new industry's share of value added will grow as green transition investments materialize, while at the same time increasing demand for planning and consulting services.

# **Business Tendency Survey**



View: Based on the Confederation of Finnish Industries' Business Tendency Survey, currently the biggest challenge for growth is insufficient demand which is at the same level as during the corona pandemic. The availability of labour has eased a little, but it is still a significant slowdown in the companies' operations.

# The Finnish economy is expected to develop in a positive direction

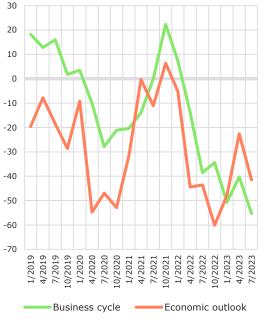
- Forecasts indicate that the Finnish economy will turn to growth in 2024.
- However, there is significant variation in the predictions depending on the entities.
- The differences in the forecasts for 2024 are between 0.9 and 4.5 percentage points, depending on the indicator.

The graphs show the average for the development of Finland's economy and employment calculated from the economic forecasts of nine different parties. The forecasts have been compiled for the period from 1 January 2023 to 30 June 2023 from the assessments of international and Finnish banks, statistical authorities and research institutes.



# **Building Construction Overview**

Construction industry business cycle, balance figure



#### Trends

- Confederation of Finnish Construction Industries estimates that housing construction is in a worse situation than during the financial crisis
- The number of building permits has clearly decreased and not all starts may start despite the permits, the development of housing production permits predicts a decline well into 2024
- Repair construction is slowed down by rising interest rates and renovation costs
- Outside the growth centres, the decline in office and facilities construction has been steeper than in the growth centres. Additional challenges may come from reorganization of facilities for welfare and rescue services which can further reduce the demand for facilities
- The rate of increase in construction prices has begun to stabilize. Employment in building construction industry is expected to weaken strongly
- The rapidly increased interest rate keeps housing investor demand at a low level
- The government's policy on the removal of subsidies for right-of-occupancy properties weakens the building construction trend even further

#### **Growth Drivers**

- In apartment building construction, the completion of unfinished buildings will keep the construction volume relatively high throughout the rest of the year
- According to Confederation of Finnish Construction Industries' business survey, uncertainty about the war in Ukraine and its economic effects has largely dissipated
- The investment environment in Finland is seen as positive and green transition investments are expected to accelerate economic growth
- Permit processing for green transition projects has been given temporary priority in Regional State Administrative Agencies for 2023–2026
- Post-pandemic hybrid working has become common, and it increases the demand for new, more efficient office spaces
- Confederation of Finnish Construction Industries estimates that the basic demand for apartments will remain strong in the coming years due to urbanization and the growth of consumer incomes
- With urbanization, the provision of public services increases the volume of public buildings, especially in growth centres

# **Infrastructure Construction Overview**



#### Trends

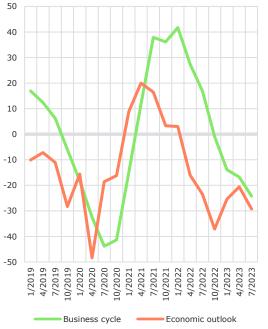
- The Ministry of Finance's RAKSU group anticipates a decrease of 8 percent in the volume of infrastructure construction in 2023, followed by a modest 1 percent growth in 2024. On the other hand, Confederation of Finnish Construction Industries and Finnish Civil Engineering Advisory Board estimate a 5-6 percent contraction in infrastructure construction in 2023 and a further 1-2 percent decrease in 2024
- As building construction decreases, associated infrastructure construction decreases concurrently
- Street and tramway construction is expected to remain at a high level, and road and energy infrastructure network construction is anticipated to grow in 2024
- The strong increase in the earthworks cost index in the years 2021-2022 has leveled off in 2023
- The financial difficulties of municipalities affect the reduction of budgets for infrastructure construction

#### **Growth Drivers**

- The temporary 4 billion euro investment program outlined in the government program supports infrastructure construction. The investment program consists of contributions to various projects, including labour mobility, export-driven industries, and key transport and rail projects throughout Finland. In the 2024 budget, a funding allocation of 250 million euros is earmarked for addressing the maintenance backlog in the road network
- Carbon neutrality goals are directing infrastructure investments towards rail transport, which is evident in significant railway and tramway investments in the coming years
- As urbanization continues, future investments will focus on creating pleasant, safe, and lowemission infrastructure, aiming to establish functional travel chains
- Green transition investments support the construction of facility-related infrastructure and the electricity main grid

## **Industry Overview**

Industry business cycle, balance figure



#### Trends

- The weakness of the global economy is reflected in industrial production and the industry's trend has weakened
- The Q2 results of industrial companies have declined. The period of exceptionally high profitability is estimated to have ended
- The increase in interest rates and the difficult predictability of prices reduce the trade of goods and services required for industrial investments
- Finland's geographical location next to Russia, which is engaged in aggressive warfare, has affected global industrial investments being made in Finland

#### **Growth Drivers**

- Industrial companies' strong order books help during tough times
- Finland's electricity self-sufficiency supports industrial competitiveness
- Climate awareness among industrial company customers has increased and clean energy is a crucial competitive advantage
- Green transition investments are expected to boost economic growth
- Permit processing for green transition projects has been given temporary priority in Regional State Administrative Agencies for 2023–2026
- Opportunities brought by Finland's NATO membership

### Laws governing land use and construction

**Building Act** 

Act on the Built Environment Information System

**Reform of Water Services Act** 

### **Nature Restoration and Ecological Compensation**

**EU Nature Restoration Law** 

**Ecological Compensation** 

### **Energy Consumption and Sustainable Development**

**Energy Efficiency Directive recast** 

**Corporate Sustainablity Reporting** 

### CLIMATE CHANGE AND SUSTAINABILITY GOALS



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The green transition is a great opportunity and challenge for design and consulting.

#### **DESCRIPTION:**

#### WHAT

Finland aims to achieve carbon neutrality by 2035 and halt the loss of biodiversity by 2030. Green transition investments in Finland are estimated to be around 140 billion euros by 2035.

The green transition generates new technologies that accelerate the shift away from fossil fuels. These actions save energy, improve air quality, and ensure energy security. The entire country experiences growth and new jobs, which replace disappearing jobs due to structural changes. At the same time, new expertise is developed, which is in demand worldwide, enhancing the competitiveness of Finland's export industry.

#### WHY

In addition to municipalities' goals, regional, national, and international objectives and regulations related to climate, energy efficiency, and finance impact the design and consulting sector. Building requirements in cities and legislation are becoming stricter (such as branding, climate goals, urban planning, service networks, infill construction).

There is a need for clear and measurable information on sustainable solutions, as well as information on their overall impact.

#### HOW

The shift in deisgn towards a transformative perspective means seeking environmentally positive solutions instead of just environmental balance.

#### **DRIVERS**:

Urbanization, population growth, climate change, dwindling resources, biodiversity loss, energy transition, availability of natural resources, taxonomy

#### **IMPACTS**:

A new growth engine, increased demand for sustainable solutions, heightened significance of green financing, skill requirements for new technologies, growing sector integration, changes in land use

#### OPPORTUNITIES AND CHALLENGES FOR THE DESIGN AND CONSULTING INDUSTRY

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A significant amount of green investments and the corresponding need for expertise Expanding the skillset of employees Thought leadership and influence Skill gap in new solutions and the need to update current expertise Bottlenecks in permitting processes (resources, expertise)

#### DIGITALIZATION



Artificial intelligence can free up a designer's time, but it requires a new way of thinking and expertise.

#### DESCRIPTION:

#### WHAT

Artificial intelligence will have a cross-cutting impact on several fields and functions. AI will bring the design and consulting sector closer to the ICT sector. The adoption of AI also raises essential issues related to data ownership, privacy, GDPR, and ethical considerations.

#### WHY

Streamlining planning processes and freeing up time for creativity.

#### HOW

Leveraging AI requires expertise in various areas, including service development and utilization, sales, and customer service. Human evaluation of AI's reliability will remain crucial. How can AI be employed while respecting customer confidentiality and data ownership? Can AI potentially reduce the size of planning and consulting industry if the same tasks can be performed with fewer resources in the future?

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#### OPPORTUNITIES AND CHALLENGES FOR THE DESIGN AND CONSULTING INDUSTRY

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Work automation and efficiency growth as part of various business processes Allocation of resources for creative work Opportunities for artificial intelligence in quality assurance Skills gap in utilizing solutions and competition for talent with technology companies Ethical and cybersecurity considerations in harnessing artificial intelligence

#### **BUILDING CONSTRUCTION AND REAL ESTATE**



In the future, collaboration between construction and real estate experts and energy specialists will become more integrated.

#### **DESCRIPTION:**

#### WHAT

Environmental requirements are increasingly guiding investment financing. Collaboration between construction and real estate experts and energy specialists will become more integrated in the future.

#### WHY

Rapid economic inflation and rising interest rates are putting pressure on the construction industry, but the slowing growth of construction costs and the waning of the most significant recession fears support a return to a growth trajectory in the coming years.

The increase in remote work may impact the future uses of office buildings. However, it is still too early to assess whether work will return to offices after the remote work boom.

#### HOW

Measures related to energy savings in buildings and cost reductions are attractive on both small and large scales. The challenge lies in selecting the right technologies - which ones will be successful and established in the future? There is also uncertainty in legislation regarding which measures will be relevant in the future.

n	<b>DRIVERS:</b> Urbanization, climate change, digitalization, aging building stock	<b>IMPACTS:</b> The linkage of financing to energy and environmental factors, the impact of remote work on office spaces, renovation construction, building technology solutions

#### OPPORTUNITIES AND CHALLENGES FOR THE DESIGN AND CONSULTING INDUSTRY

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Energy conservation needs in construction and real estate Demand for sustainable solutions, material and property reuse Growth in renovation construction Expertise in renovation construction Silos between different technical fields

## The impact of the design and consulting industry

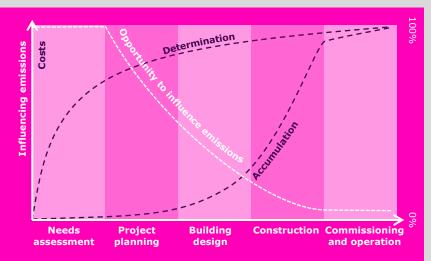
The influence of the design and consulting sector on the formation of costs and emissions

The role of the design and consulting industry in various projects and investments is highly complex, depending on the diversity of the projects and their operating environment. It is estimated that design costs account for approximately 5-10% of the total construction costs.

In the design phase, a significant portion of the solutions used in construction is defined, with an estimated 70-80% of the total construction costs determined as a result of the design phase. At the lifecycle level, the impact can be even greater, taking into account the choices made during the design phase, such as energy systems and maintenance. Lifecycle costs also involve timely maintenance, where the management of maintenance backlog for real estate and infrastructure assets increasingly requires the utilization of digitalization and the application of data-driven principles as part of asset management.

Design also plays a crucial role in emissions formation. It is estimated that design solutions influence 50-80% of the emissions generated in construction.

 $\rightarrow$  The planning and consulting sector is a significant player in all stages of the lifecycle and in every part of the value chain, providing a unique opportunity to have a comprehensive impact.



Determination and accumulation of costs & reduction of carbon footprint (approximate). Modified from (Junnonen & Kankainen 2017; Green Construction Board)