Future-proof urban development

In 2019, Fabege worked on a scenario analysis together with the Stockholm Environment Institute, municipalities and business partners, in order to future-proof operations. Climate change, rapid geopolitical changes, a soaring population, urbanisation and other challenges create uncertainty about the future. Fabege's risks and opportunities have been analysed based on the four future scenarios described below, in order to ensure sustainable urban and regional development in Stockholm going forward.

SCENARIO 1: "THE UN CITY"

Urban development is characterised by the UN ideals, i.e. sustainable development achieved via international treaties, ambitious collaboration and fair trade, which requires society to make major changes.

Effective climate agreements have reduced greenhouse gas emissions despite increasing prosperity across the world. Sweden has invested heavily in infrastructure for renewable energy, public transport and circular materials management, while global demand for sustainable solutions for society has steadily risen.

Effects of future weather events in a future society. The average temperature in Stockholm has risen by 1.5–3 degrees. More, and stronger weather events. Change in precipitation patterns and considerable variations in weather patterns. Rise in sea levels.

Role of urban development:

Contribute towards achieving UN's 17 Sustainable Development Goals.

SCENARIO 2: "THE NETWORK CITY"

Concerns about climate change have led to a decline in global transportation and greater demand for green technology and local products.

Increasing costs for sustainable energy supply hamper the potential for global growth.

The need for supplies of local resources has resulted in new solutions, high capacity utilisation of capital goods, a large element of the sharing economy, new circular business models and networks of cooperating operators.

Effects of future weather events in a future society. The average temperature in Stockholm has risen by 1.5–3 degrees. More, and stronger weather events. Change in precipitation patterns and considerable variations in weather patterns. Rise in sea levels.

Role of urban development:

To create a dynamic local society that is integrated into global value-creating networks.

Risks that affect Fabege

- More stringent demands for carbon reporting
- Cost of changing over to low-carbon building materials
- Higher costs for raw materials and waste handling
- Changes in the valuation of assets (stranded assets)

Opportunities for Fabege

- Higher values for environmentally certified, energy-efficient and energy-positive properties
- Reduced exposure to rising fossil energy pricesIncreased market value via resilience planning
- (for example infrastructure, land, buildings)
- Increased revenue via demand for products and services with lower carbon dioxide emissions

Risks that affect Fabege

- · Stuck with infrastructure designed for other conditions
- · Higher costs for local energy supply
- Cost of raw materials increases due to limited access to materials in the local economy
- Insufficient energy supply

Opportunities for Fabege

- Greater resource efficiency
- Higher values for environmentally certified, energy-efficient and energy-positive properties
- Potential to increase exchanging and sharing of resources
- Extend the financial relationship with the customer through maintenance, repairs and new types of service offerings.

SCENARIO 3: "THE TECH CITY"

Market-driven globalisation initially generated substantial productivity gains and a larger global middle class.

The market developed energy-smart systems, production optimisation and customised solutions with the help of robots, sensors and IoT. Meanwhile, total

dependency on natural resources increased. Growth pressure and limited resources led to regional

crises and escalating climate effects. Growing environmental problems have fuelled demand for technical solutions that can radically reduce the environmental and climate impact of the economy.

Effects of future weather events in a future society. The average temperature in Stockholm has risen by 1.8–2.5 degrees. More, and stronger weather events. Change in precipitation patterns and considerable variations in weather patterns. Rise in sea levels.

Role of urban development:

Develop sustainable, eco-friendly, low-carbon solutions for society with efficient use of materials.

SCENARIO 4: "THE CITY REGION"

Conflicts and competition for global resources have led to low global growth, with major differences between countries.

Dense urban populations have caused growing environmental problems and greater inequality between social groups.

Regional and local businesses are the backbone of the economy.

Transport flows are increasingly between cities and the surrounding rural areas.

Effects of future weather events in a future society. The average temperature in Stockholm has risen by 2–4 degrees. More, and stronger weather events. Change in precipitation patterns and considerable variations in weather patterns. Rise in sea levels.

Role of urban development:

To integrate cities with surrounding areas and adjust transport flows

Risks that affect Fabege

- Reduced focus on recreational values
- Social ill health and segregation
- Greater dependence on natural resources
- Escalating climate effects

11111

Opportunities for Fabege

- Energy balance/self-sufficiency
- Customised solutions with the help of robots, sensors and IoT
- Higher values for environmentally certified, energy-efficient properties
- Eliminating district boundaries to reduce segregation

Risks that may affect Fabege

- Access and transport problems
- Limited electrification of transport sector
- Shortage of materials
- Local overpopulation, lack of land and high pressure in city centres, followed by people moving out

Opportunities for Fabege

- Create spaces/premises for reuse/recycling
- Digitalisation and smart technology
- Higher values for environmentally certified, energy-efficient properties
- Urban gardening leads to more attractive and healthier cities

FABEGE'S WORK OVER THE COMING YEARS

The future will be a combination of various elements of these scenarios, and events that at this point we are unable to predict. We are continually monitoring developments to evaluate the need for changes in order to manage the risks we identify. The purpose is to ensure a robust business model that is profitable and successful in the long term, whatever the future holds. Find out more on the following pages about, for example, our goal of carbon neutral property management by the year 2030, and how we are working to create well balanced, sustainable premises, buildings and urban environments that promote people's long-term physical and social needs.

or