

The Future mine and Mineral conference

2021 – 02 - 23

THE FUTURE OF LKAB

THE LARGEST TRANSFORMATION IN LKAB'S 130-YEAR HISTORY

MINING BEYOND 2060

Increased exploration and our new strategy initiates the transformation

SEK 700 million invested
in exploration

Increased mineral resources
secure operations



WE TAKE A NEW POSITION ON THE MARKET

A successive change from supplier of iron ore pellets to supplier of sponge iron



Fines



Iron ore pellets



Sponge iron

THE FUTURE OF LKAB

Change in three major areas


New world standard
for mining

Carbon dioxide-free sponge
iron with hydrogen technology

Extract critical minerals
from mine waste

CARBON DIOXIDE-FREE IRON FOR A SUSTAINABLE FUTURE

Increased demand when old fossil technology is replaced with new technology

The background image shows a vast field of solar panels in the foreground, reflecting the warm light of a setting or rising sun. In the distance, several wind turbines are silhouetted against a colorful sky with soft clouds. The overall scene conveys a sense of clean, sustainable energy.

Iron is indispensable for climate change and for building railways, wind turbines, electric cars and the industrial machines that manufacture them

THE INDUSTRY'S CLIMATE IMPACT TODAY

2.6 billion

tonnes carbon dioxide totally from
the iron and steel industry

7%

of all carbon dioxide emissions
globally

1/4

of global industry's carbon
dioxide emissions

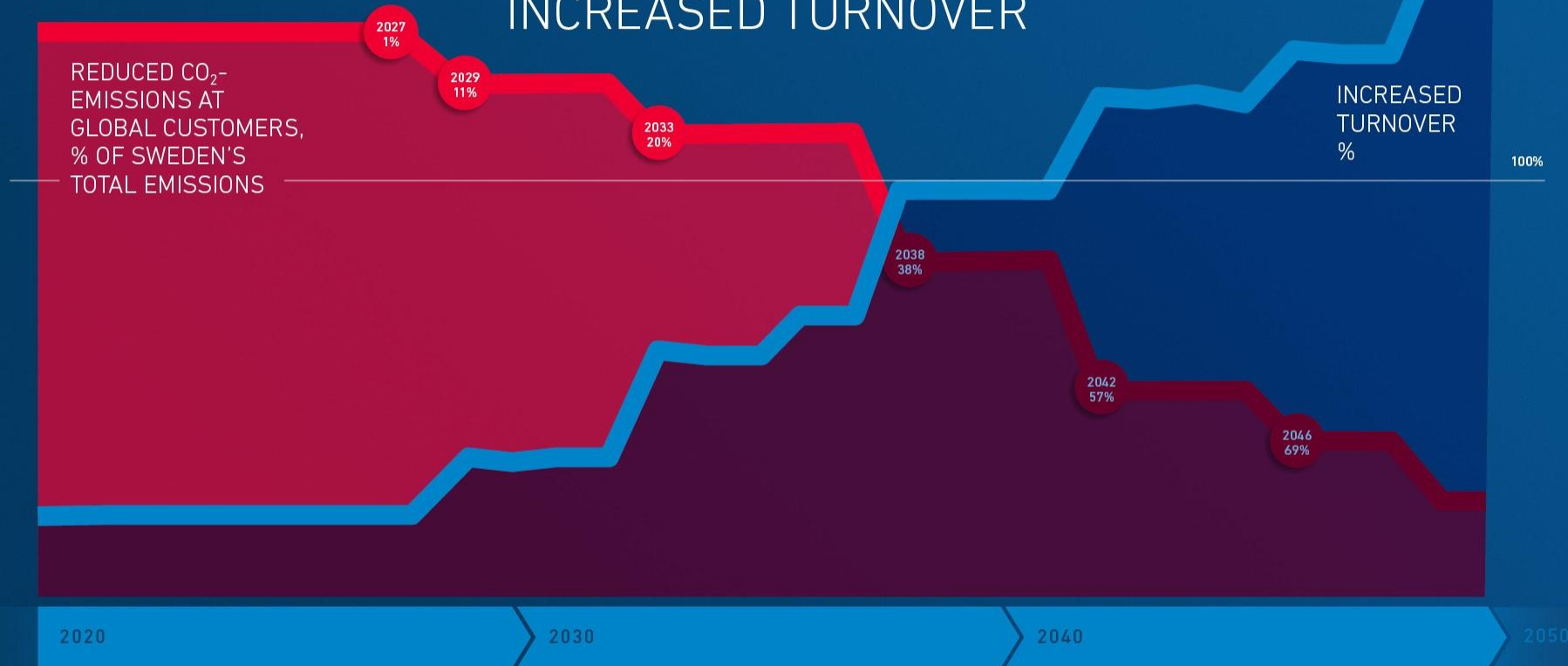


REDUCED CARBON DIOXIDE EMISSIONS AND INCREASED TURNOVER

REDUCED CO₂-
EMISSIONS AT
GLOBAL CUSTOMERS,
% OF SWEDEN'S
TOTAL EMISSIONS



REDUCED CARBON DIOXIDE EMISSIONS AND INCREASED TURNOVER



FROM A PART OF THE PROBLEM TO A PART OF THE SOLUTION

35,000,000 tonnes

LKAB contribute to reducing carbon dioxide emissions by 35 million tonnes

2/3

corresponding to 2/3 of Sweden's carbon dioxide emissions

3

times as much effect as if we stopped driving all cars in Sweden for good



THE PACE OF TRANSFORMATION

2025
DECISION ON
GOING DEEPER IN THE
IRON ORE MINES
ALT.
EXISTING MINERAL
RESOURCES WILL BE
MINED OUT



2027
Industrial park
for recycling
minerals in
production

2030
Infrastructure investment
for expansion in the
mines (Malmberget, Kiruna,
Svappavaara)

2035
New world standard for
mining at great depths
that gives an increase in
production by 15 percent
(Malmberget, Kiruna)

2045
LKAB's processes
and products
are carbon dioxide-free

THE MINE OF THE FUTURE

2020
LKAB produce
the world's first
fossil-free iron
ore pellets

2033
Sponge iron
plant in production
(Malmberget)

2038
Sponge iron
plant in production
(Kiruna)

2045
Sponge iron
plant in production
(Kiruna)

HYDROGEN TECHNOLOGY IS OUR WAY FORWARD / SPONGE IRON

FUTURE PROCESSING

2029
Sponge iron
plant in production
(Malmberget)

2038
Sponge iron
plant in production
(Malmberget)

2042
Sponge iron
plant in production
(Kiruna)

2020

2030

2040

2050

CHALLENGES TO OVERCOME

Permit processes

Towards 2,000 metres

Financing

Green electricity

Technology development

Competence

Time

Hydrogen