Mining with Nature – Net Gain!

Project leader Sara Carlsén, Boliden Mineral AB

Partners Boliden, LKAB, Heidelberg Materials, Zinkgruvan AB, Kaunis Iron, Nordkalk, Ecogain, SLU

Project duration 1 April 2023 – 1 September 2024

SWEDISH MINING INNOVATION



Med stöd från



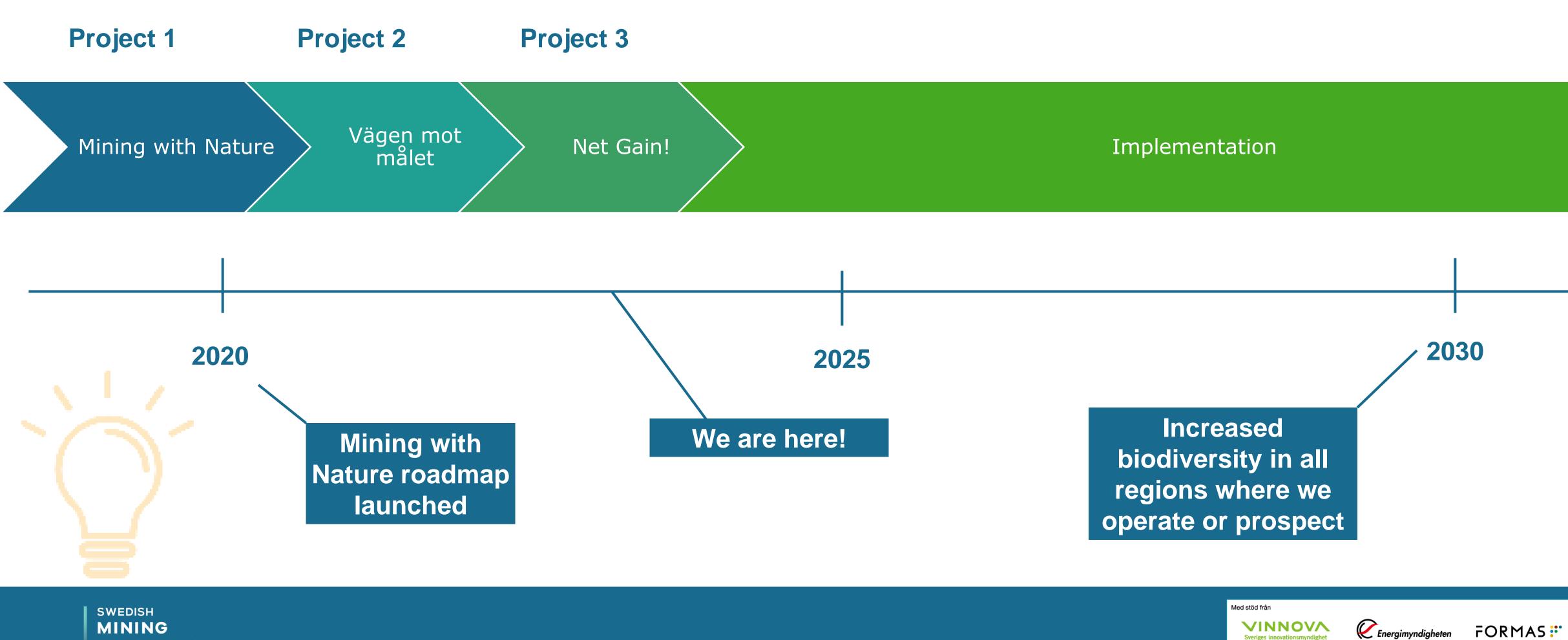


Energimyndigheten FORMAS



Strategiska innovations-program

The Mining and minerals industry roadmap for increased biodiversity by 2030



INNOVATION





Strategiska innovations-program



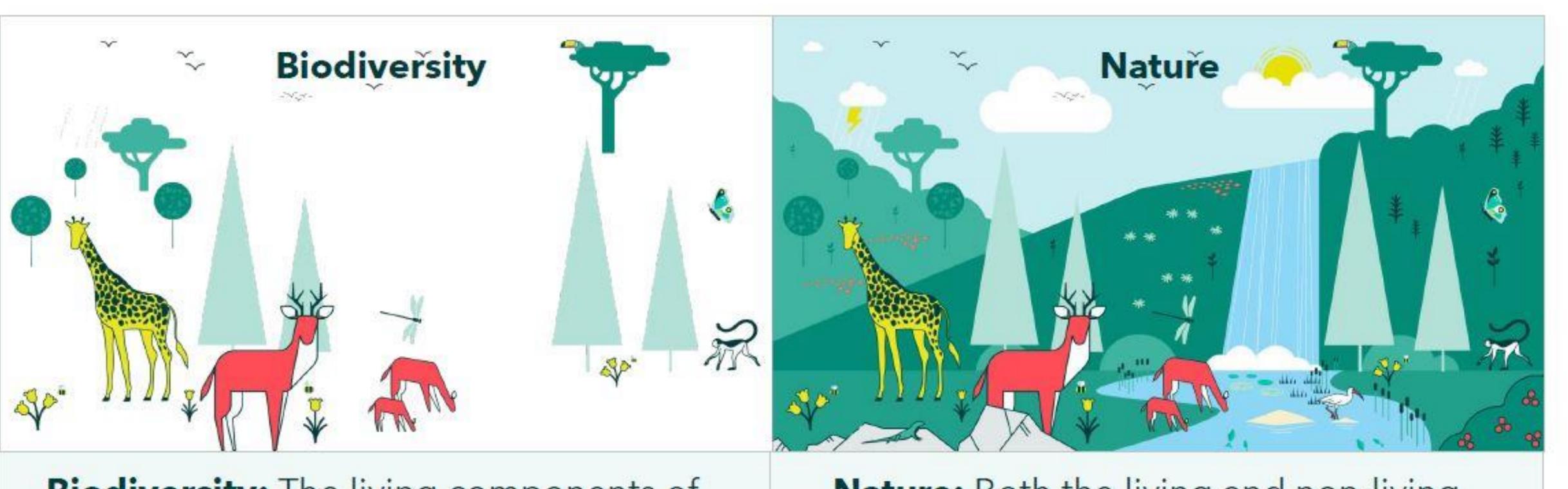
MINING WITH NATURE The Swedish mining and minerals industry's road map for biodiversity net gain

SveMin



The Swedish mining and minerals industry has set a target to increase biodiversity in all regions where we operate or prospect by 2030

From "Mining with Nature" Roadmap



Biodiversity: The living components of the natural world, e.g. plants, animals, soil microbes etc.

Nature: Both the living and non-living components, e.g. biodiversity plus water, geology and the atmosphere



4

- 75 % of earths surface heavily impacted by human activities (Ipbes 2019)
- Populations of mammals, birds, fish, reptiles and amphibians have declined by 70% since 1970 (Ipbes 2019)
- 1 million animal and plant species are threatened with extincion (around 10 % of species)

HABITAT LOSS

Thinning, fragmenting, or outright destruction of an ecosystem's plant, soil, hydrologic, and nutrient resources

-INFLUENCERS

- Human population growth
- Increasing consumption
- Reduced resource efficiency

PRIMARY DRIVERS

INVASIVE SPECIES

Any nonnative species that significantly modifies or disrupts the ecosystems it colonizes

OVEREXPLOITATION

Process of harvesting too many aquatic or terrestrial animals, which depletes the stocks of some species while driving others to extinction

POLLUTION

Addition of any substance or any form of energy to the environment at a rate faster than it can be rendered harmless

CLIMATE CHANGE ASSOCIATED WITH GLOBAL WARMING

Modification of Earth's climate associated with rising levels of greenhouse gases in the atmosphere over the past one to two centuries

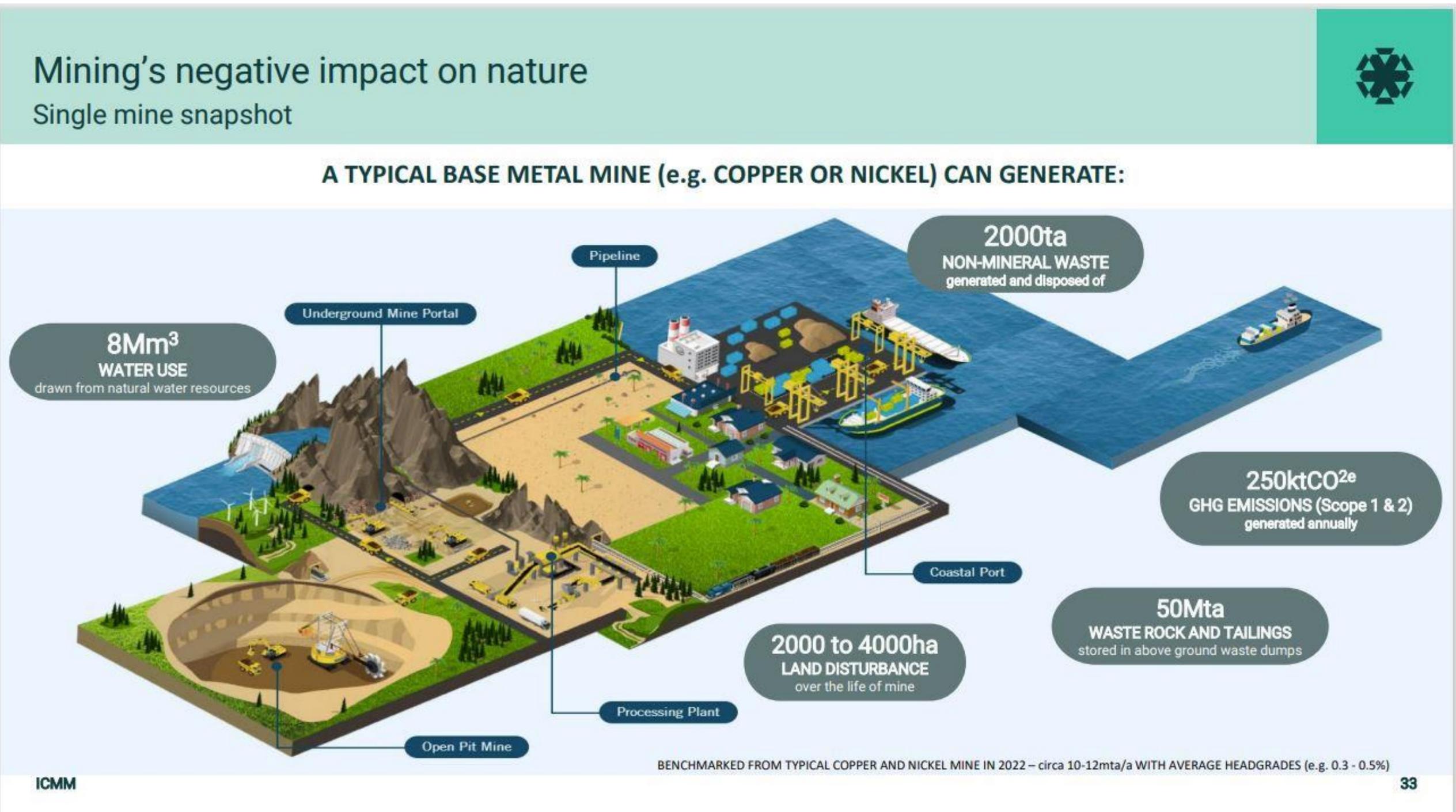
ation growth Insumption urce efficienc

BIODIVERSITY LOSS

Reduction in the number of genes, individual organisms, species, and ecosystems in a given area







MÅNGFALD ISK J 010 \mathbf{m}

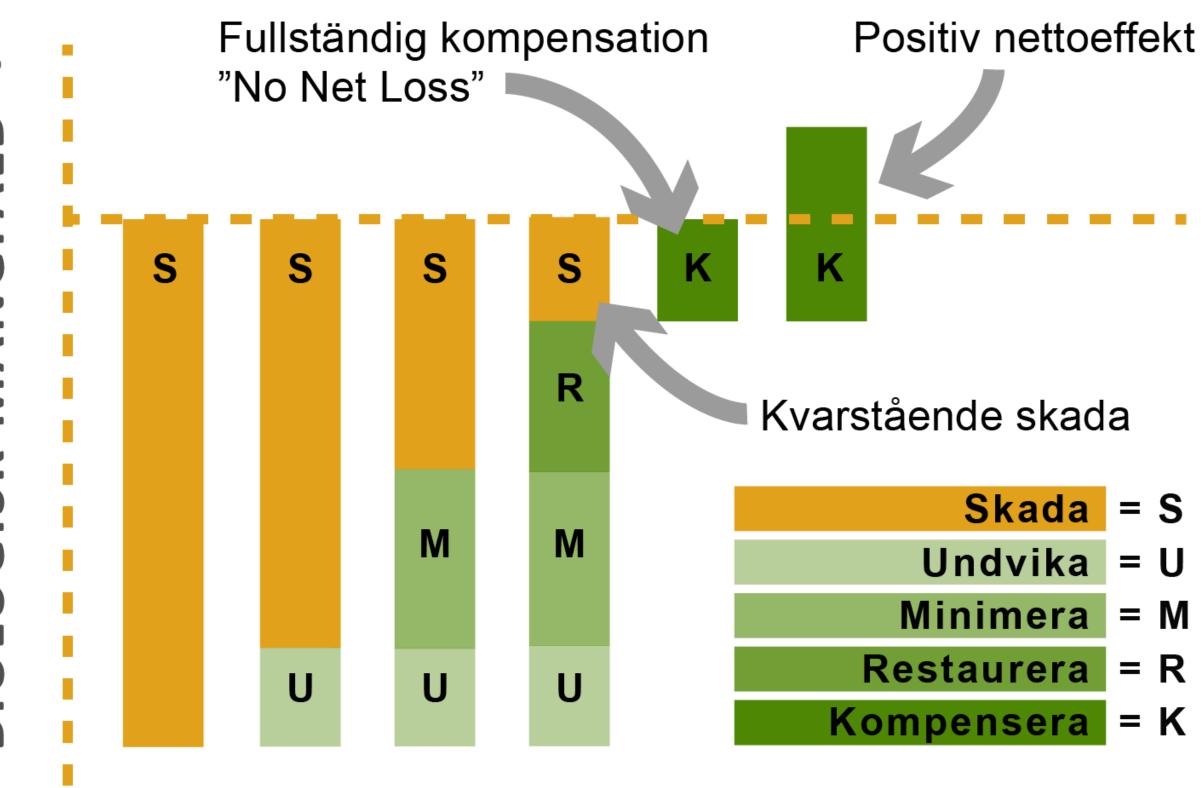
The mitigation hierarchy is an important part of the Mining with Nature roadmap

The more we can do in the earlier steps, the less we need to do in the next steps to achieve the industry goal of increased biodiversity.

The mitigation hierarchy consists of the following steps:

- 1. avoid,
- 2. minimize;
- 3. Restore and
- 4. Compensate

SWEDISH MINING INNOVATION



Med stöd från







Strategiska innovations program

Mining with Nature – Net Gain

The overarching goal of "Mining with Nature – Net Gain!" is to ensure implementation of our roadmap among member companies through:

- practices
- Developing guidance documents and establishing best practices for the Mining industry
- inspire other industries to follow our example
- otherwise suggest improvements
- Transparant reporting on our progress

SWEDISH MINING INNOVATION



Training and education among our employees to raise awareness and knowledge about biodiversity best

Communication and networking, with an aim strengthen the social acceptance of mining industry and to

Critical review of the roadmap by SLU, to ensure planned actions will suffice to reach our target, and to









Strategiska

Results so far

- •Speaking and networking at numerous events
- •Roundtable discussions with stakeholders at Almedalen
- •Digital training platform 200 employees invited for trainings
- •Feedback from trainings has informed updates to training platform
- •Long term administration of training platform secured
- Launch of Svemin biodiversity competition
- •Guidance draft on materiality assessment
- •Guidance draft on biodiversity risk analysis
- •Workshop with prospecting companies
- •Updates to reporting templates

SWEDISH MINING INNOVATION

In och nominera till **Svemins Biodiversitetspris** 2025!

Vilka bidrag kan du nominera?

Främjande åtgärd/er som har eller kommer att ha en långsiktigt positiv påverkan på biologisk mångfald. Åtgärder måste ha utförts av ett av Svemins medlemsföretag.

Till exempel:

- Gröngöra industriområden
- Skapa natur på nedlagda gruvor
- Höja naturvärden genom restaurering eller kompensation

Vinnaren presenteras på Svemins miljökonferens 2025

Anmälan är öppen! Skicka in ditt bidrag senast 31 december 2024 Läs mer på www.svemin.se/projekt-svemins-biodiversitetspris/

Med stöd från







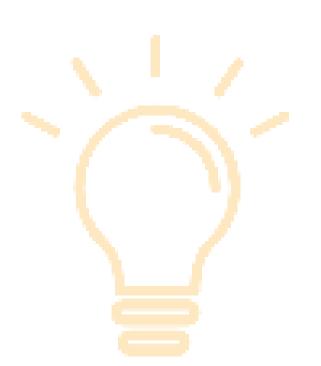




Strategiska

Upcoming activities and next step

- Guidance on ecological compensation
- First joint external reporting on progress for reporting year 2023
- Launch of updated digital training platform
- Templates for workshops and quiz to complement digital training in biodiversity
- Continued roundtable discussion with stakeholders
- Speaking and networking at several events during spring and summer
- Critical review of roadmap (SLU)
- Updates to roadmap following recommendations from SLU



SWEDISH MINING INNOVATION

Med stöd från





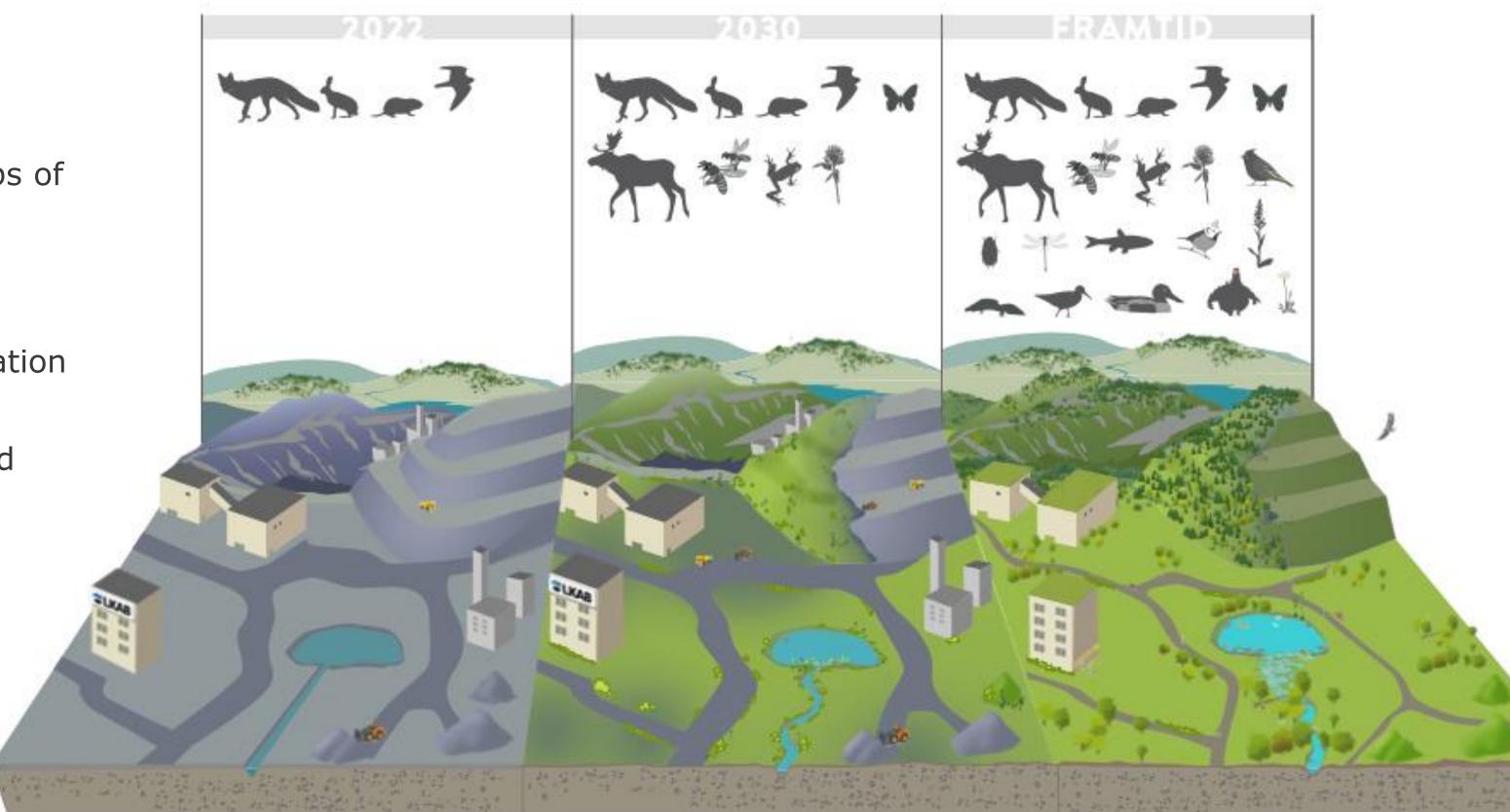
Energimyndigheten FORMAS



Strategiska innovations program

Challanges

- Ensuring implementation in smaller companies
- Imlementing and integrating the mitigation hierarchy through all steps of our operations: from business development and design to project managing and entrepeneurs on site
- Land access for ecological compensation
- Long term administration and coordination once project has ceased





SWEDISH MINING INNOVATION

Med stöd från





Energimyndigheten FORMAS





Strategiska innovations-program

Mining innovation for a sustainable future

SWEDISH MINING INNOVATION

Med stöd från









Strategiska innovations program