



# Nature risk report

Aligned with the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD)

December 2025

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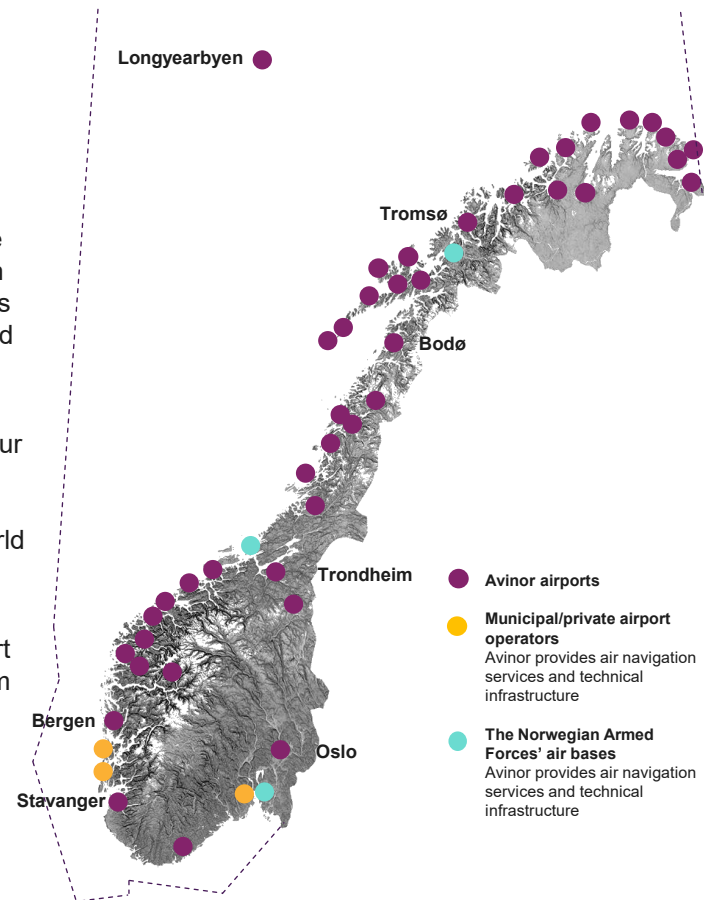
# Preface

As a state-owned company operating 43 airports and managing Norwegian airspace, Avinor depends on healthy ecosystems to ensure safe, reliable, and sustainable operations. Nature provides essential services – such as water regulation and flood protection – that strengthen our resilience to climate change and support our infrastructure. At the same time, nature acts as a local indicator of whether we are succeeding in reducing our environmental footprint and operating in harmony with the ecosystems around us.

Avinor has long worked to protect and restore nature, from safeguarding ecosystems near our airports to minimizing land use impacts. This report, developed in line with the TNFD framework, helps us better understand and manage the risks and dependencies our operations have on nature. By doing so, we strengthen our ability to adapt to a changing world while contributing to the preservation of vital ecosystems.

The work with nature-related risk analyses is still in its early stages for Avinor, and this report represents an important step forward. By exploring and addressing these challenges, we aim to build a better understanding of how nature impacts our operations – and how we, in turn, impact nature. This is essential for ensuring the long-term sustainability of our airports, airspace, and the communities we serve.

Abraham Foss  
CEO, Avinor



# Executive summary

## Purpose

The purpose of this report is to describe Avinor's process for identifying and assessing nature-related dependencies, impacts, risks and opportunities and provide insights into how the company aims to manage its nature-related issues. The assessment was carried out in accordance with the LEAP methodology and the reporting framework developed by the Taskforce on Nature-related Financial Disclosures (TNFD).

## Scope

The LEAP assessment which this report is based on has only considered Avinor's own operations.

## Scenario analysis

Identified risks and opportunities have been assessed across two nature-scenarios developed by the TNFD. This is done to create challenging «what if» analyses and capture a wide range of assumptions about uncertain futures, allowing for a more robust assessment of risks and opportunities.

## Strategic implications

Avinor will strengthen its focus on nature-related risks and opportunities to ensure long-term resilience to nature issues and compliance with evolving biodiversity and environmental regulations. This includes integrating nature considerations into infrastructure planning, operational practices, and investment decisions. These actions are important to ensure operational reliability, protect Avinor's reputation, and position the company as a responsible leader in sustainable air transport, contributing to a more nature-positive economy.

## Results: Material risks and opportunities

### Physical nature risks

More unpredictable snow and frost conditions, as well as temperature fluctuations around the freezing point, result in challenging winter maintenance and operations, infrastructure demands, and potentially increased costs.

The degradation of natural storm buffers, combined with frequent or more severe storms can potentially lead to significant disruptions and increased maintenance cost.

### Transitional nature risks

Stricter environmental regulations on land use, constraints on new airport project and higher compliance costs can lead to delays in infrastructure development and increased financial pressure.

PFAS contamination may trigger litigation and regulatory actions, resulting in higher compliance and operational costs.

As a result of stricter environmental regulations on de-icing chemicals, expanded monitoring and infrastructure upgrades may occur, which could result in higher expenditures and operational complexity.

New policies on microplastics may impose compliance obligations, leading to higher operational costs and monitoring requirements.

### Opportunity

Air travel's high land-use efficiency compared to other transport modes offers a competitive advantage, and when combined with environmentally friendly technologies such as electric aviation, supporting stronger positioning as a sustainable transport option.



# 01 Introduction

# Context

Nature and biodiversity are under unprecedented pressure. Globally, ecosystems are being degraded at an accelerating rate, with deforestation, land-use change, pollution, climate change, and overexploitation driving the loss of species and ecosystem services. According to the IPBES Global Assessment<sup>1</sup>, around one million species are currently at risk of extinction, many within decades. This loss of natural capital directly undermines the stability of the global economy, as all industries depend on functioning ecosystems for resources, resilience, and long-term sustainability.

For the aviation sector, the interdependence with nature is complex. The industry both impacts and depends on natural systems through land use, resource consumption, and emissions, while also facing growing risks from nature degradation, including physical risks such as increased weather volatility and regulatory risks as governments strengthen biodiversity policies. As a key national infrastructure operator, Avinor plays a crucial role in ensuring that aviation in Norway evolves in a way that aligns with global sustainability commitments. Integrating nature-related considerations into strategic and operational decisions enables Avinor to anticipate regulatory developments, protect ecosystem services that support operations, and contribute to Norway's broader transition toward a nature-positive economy.

Avinor's nature efforts aim to meet growing stakeholder expectation regarding the integration of business and nature. The growing expectations are evident from the Norwegian government's white paper on ownership policy<sup>2</sup> from 2022, which encourages state-owned enterprises to prepare climate and nature risk assessments. Similarly, demand for such information is also increasing across financial markets. Avinor welcomes these developments and actively seeks to meet evolving requirements. The company views the nature risk assessment as a strategic tool to fulfil Avinor's mission to ensure connectivity throughout the country, strengthen resilience and contribute to a more sustainable aviation sector. Avinor's nature risk assessment, developed with assistance from KPMG, has partly been conducted in parallel with the company's TCFD-aligned climate risk assessment, and the two assessments have informed each other where appropriate.

<sup>1</sup> [The global assessment report on biodiversity and ecosystem services](#)

<sup>2</sup> [Greener and more active state ownership](#) (Meld. St. nr 6 2022-2023)

# Avinor's nature journey

Avinor has integrated its work on nature with its approach to reducing negative climate and nature impacts, embedding environmental considerations into operations, infrastructure planning, and strategic development. Professional biologists have since 2008 conducted biodiversity field surveys at all airports managed by Avinor and several measures are taken. However, the company recognises that its work on nature-related issues is less mature than its climate efforts. To address this, Avinor has conducted a nature risk assessment following the TNFD's LEAP approach across all Avinor's airports to identify material nature-related dependencies, impacts, risks, and opportunities and to determine measures that will ensure robust and nature-positive operations in the coming years. Avinor acknowledges the growing expectations for businesses to disclose nature-related issues and welcomes these developments.

## Scope and limitations of the LEAP approach

### Scope

The scope of the LEAP assessment was limited to Avinor's own operations. According to the TNFD guidance, this is considered a reasonable first step. By limiting the assessment to its own operations, Avinor was able to establish a more comprehensive understanding of its direct relationship with nature. This provides a foundation from which the company can expand its nature efforts in the future.

### Limitations

The Evaluate phase requires a substantial set of metrics to evaluate dependencies and impacts. While all metrics used were assessed to be relevant, their direct relevance to Avinor's operations may vary due to lack of alternatives. This is particularly true for some variables used to evaluate dependencies, where Avinor itself has limited data and therefore relies on more general data from third-parties. This is considered an acceptable compromise and may be updated in the future if more relevant data becomes available.

It should also be noted that the prioritisation methodology used in the Evaluate phase tends to favour larger airports. While this bias is partly justifiable, it can result in smaller airports with specific nature-related issues receiving lower scores than they merit. The prioritisation of airports therefore served as useful input to the Assess phase, but airports which received lower priority were not disregarded.

# The TNFD's framework for nature risk assessments

The Taskforce on Nature-related Financial Disclosures (TNFD) provides a framework for organisations to identify, assess, manage, and disclose nature-related dependencies, impacts, risks, and opportunities. Modelled on the success of the TCFD for climate-related disclosures, the TNFD aims to shift global financial and business decisions towards nature-positive outcomes by integrating nature into corporate strategy, risk management, and financial planning. By aligning disclosures with mainstream sustainability and financial reporting standards, the TNFD supports transparency and comparability across sectors and markets, helping investors and stakeholders make better-informed decisions that account for nature-related risks and opportunities.



Structure and principles of TNFD



# 02 Governance

# Governance and sustainability management

Avinor has ongoing processes to maintain an overview and insight into the drivers and trends that affect the aviation ecosystem nationally, in the EU, and globally. This forms the basis for a corporate strategy that ensures Avinor fulfils its societal mission in a sustainable, efficient, and forward-looking manner in line with sector policy objectives.

The Board of Directors at Avinor has the overall responsibility for monitoring and supervising sustainability-related impacts, risks and opportunities. This responsibility is embedded in the company's articles of association.

Avinor's Group Management, led by the CEO and supported by an Executive Management Group, plays a central role in sustainability management. The Executive Management Group is involved in the assessment of impacts, risks and opportunities through meetings with the EVP of Strategy and Corporate Governance (CFO) and the Corporate Accounting function. The EVPs have operational responsibility for following up on sustainability targets and measures within their respective business functions, and all targets are a part of Avinor's established process for strategic corporate governance. The Executive Management Group assess each business area's targets, which are then ultimately decided by the board. All targets are followed up through quarterly business reviews.

Furthermore, the Group Management is responsible for establishing and revising Avinor's climate and environmental policy which sets out overarching principles governing the company's approach for this work. According to the policy, Avinor shall comply with regulatory and internal requirements, and environmental management shall be certified in accordance with the ISO 14001 standard for environmental management systems, ensuring a systematic approach to coordination and following up on environmental efforts. The operational line has responsibility for meeting environmental requirements in action plans centrally or locally within the organisation. The company is expected to actively work to reduce its environmental impacts, and sustainability goals shall be emphasised in Avinor's decisions.



# 03 Strategy

# What are dependencies, impacts, risks and opportunities?

Avinor recognises nature-related risk as the potential for the loss of biodiversity and ecosystem services to disrupt human and ecological systems, with implications for operational resilience and financial stability. These risks arise from both physical changes in nature, such as habitat degradation and reduced ecosystem functionality, and systemic transition risks linked to evolving policy, regulation, technology, and market expectations around nature-positive practices. Avinor's operations depend on healthy ecosystems for services such as water regulation and carbon sequestration, while also generating impacts through land use and emissions. Understanding these dependencies and impacts is essential to identify where risks may materialise and how they could affect asset values, supply chains, and long-term viability.

At the same time, the shift towards nature-positive business models creates opportunities for innovation and value creation. By integrating biodiversity and nature considerations into planning and investment decisions, Avinor can strengthen resilience, enhance stakeholder trust, and contribute to global sustainability goals.

## Physical risk

Threats to an organisation's business operations, assets and/or value chain due to environmental degradation and biodiversity loss. Physical risks can be acute or chronic and both types can lead to operational disruptions, increased costs, stranded assets and reduced financial performance.

## Transition risk

Exposure amid the societal and regulatory shift towards a nature-positive economy that may manifest across existing risk types, including heightened regulatory, reputational, policy, legal, technology and market risks.

## Dependencies

Aspects of environmental assets and ecosystem services that an organisation relies on to function. Avinor is, among other things, dependent on predictable weather to perform its operations according to schedule.

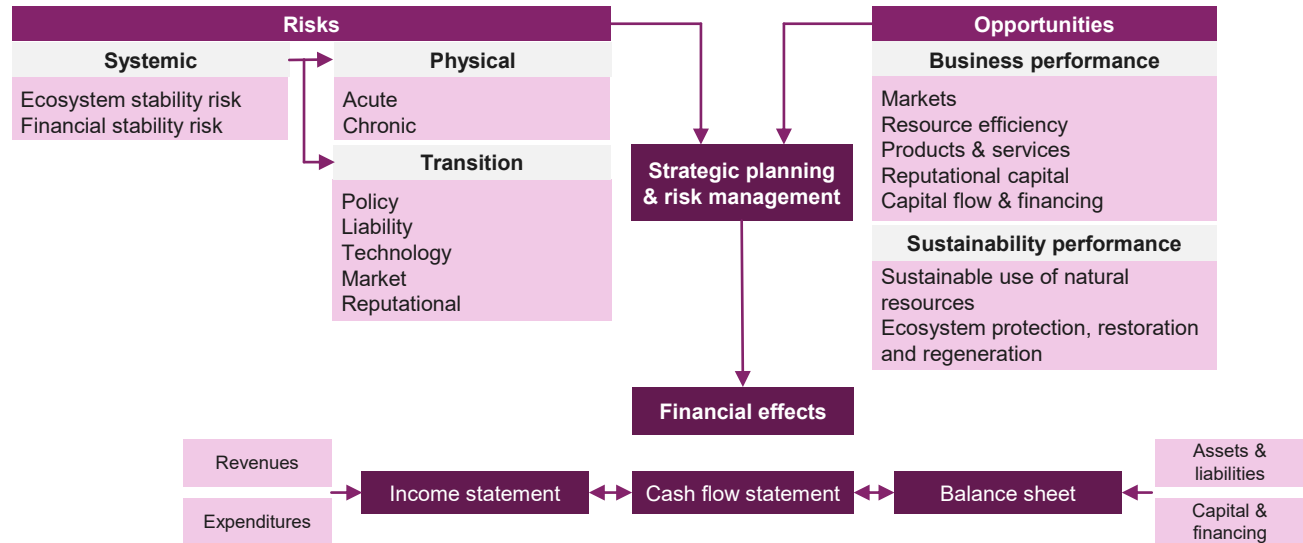
## Impacts

The changes in nature stemming from an organisation's activities that may occur directly, or indirectly through supply chains and investments. Such impacts can be negative, e.g. through habitat destruction, or positive, e.g. relating to conservation efforts.

# Financial effects arise from dependencies and impacts

Avinor's dependence and impact on nature can give rise to financial effects in various ways. The diagram below, developed by the TNFD, illustrates how nature-related risks and opportunities may affect Avinor's strategic planning and risk management, causing financial effects on the company's income statement, cash flow statement or balance sheet.

The TNFD model illustrates how nature-related risks and opportunities influence a company's strategy and financial outcomes. It shows that environmental factors create both risks (like physical damage or market changes) and opportunities (such as new sustainable products or efficiency gains). These are integrated into a company's strategic planning and risk management processes, leading to measurable financial effects. Ultimately, the model connects nature-related issues directly to financial performance, demonstrating how they can impact revenues, costs, assets, and liabilities.



# Quick introduction: Methodology and scenario analysis

Avinor's nature risk assessment was performed according to the LEAP approach recommended by the TNFD. Over the course of 2024 and 2025, Avinor identified and assessed nature-related dependencies, impacts, risks and opportunities in its own operations. The assessment resulted in a longlist of risks and opportunities, which was then assessed through scenario analysis to determine materiality. A more thorough description of this process can be found in the [Risk management chapter](#).

## Identification

In the initial phase of the assessment, Avinor identified its key interfaces with nature and mapped priority activities to be assessed. Next, Avinor defined nature-related impacts and dependencies, and evaluated the materiality of its locations from a nature perspective.

## Scenario analysis

A longlist of nature-related risks and opportunities was developed, derived from the identified impacts and dependencies, desktop research and expert insights. By employing scenarios developed by the TNFD\*, Avinor assessed and prioritised its risks and opportunities and applied materiality thresholds to arrive at a shortlist of material risks and opportunities. All risks and opportunities were assessed considering the scenarios listed below, across short-term (2025), medium-term (2050 for physical risks and 2030 for transition risks) and long-term (2071-2100 for physical risks and 2050 for transition risks) time horizons.

### Ahead of the game

Strong climate policies and public demand drive investments in clean tech and nature-positive solutions, supported by stable economies and political action.

### Sand in the gears

Fragmented priorities, scientific complexity, and lack of standards slow progress on biodiversity, as focus remains on carbon reduction.

## Result

The resulting shortlist of material dependencies, impacts, risks and opportunities are presented on the next slide. The final list accounts for uncertainty through the use of scenario analysis, thereby providing a robust assessment of how nature-related issues could affect the company financially.

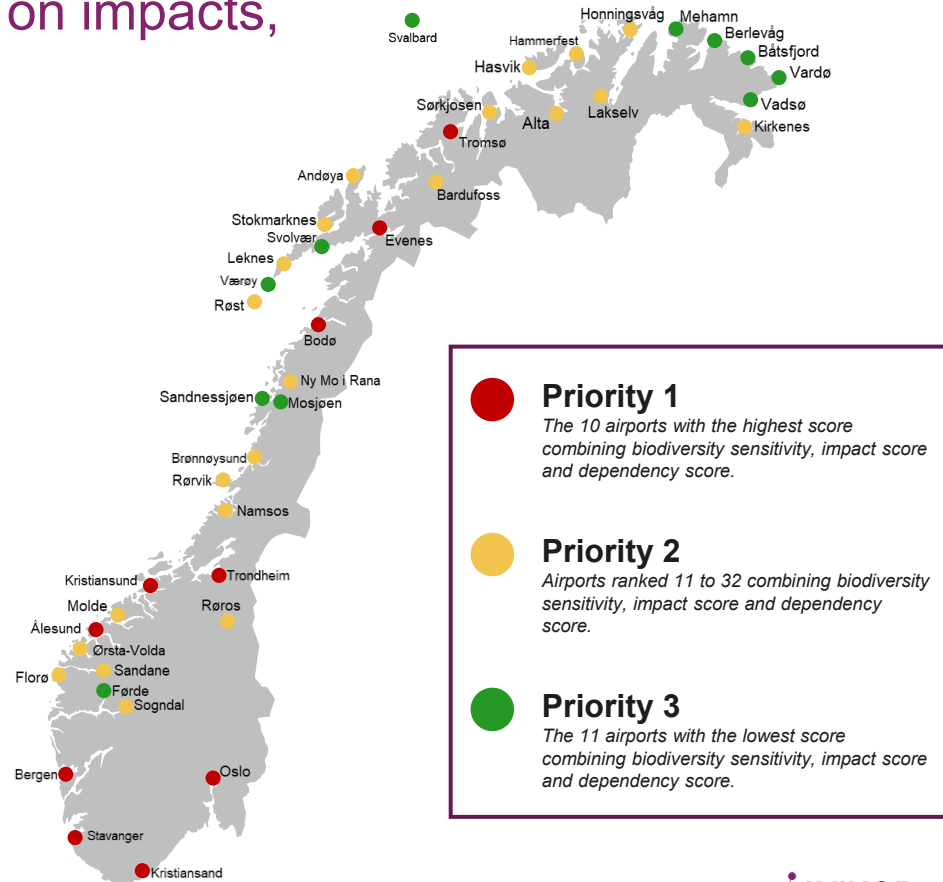
\*TNFD Guidance on scenario analysis

# Avinor's airports prioritised based on impacts, dependencies and sensitivity

The overview to the right illustrates a prioritisation of Avinor's airports based on their respective importance from a nature perspective. This prioritisation is a result of the first two phases of the LEAP assessment and takes into account each location's impact and dependency score, as well as their nature sensitivity.

This prioritisation forms the foundation for identifying and assessing nature-related risks and opportunities. Detailed information on the prioritisation process can be found in the [process description](#).

It should be emphasised that while the prioritisation provides a useful indication as to which airports may be most important from a nature perspective, the metrics have certain limitations. Airports classed as priority 2 and 3 are therefore not disregarded, as the metrics used in the prioritisation may not accurately capture their most important nature-related issues. Notably, Svalbard is classed as priority 3 but remains important from a nature perspective.



## Priority 1

The 10 airports with the highest score combining biodiversity sensitivity, impact score and dependency score.



## Priority 2

Airports ranked 11 to 32 combining biodiversity sensitivity, impact score and dependency score.



## Priority 3

The 11 airports with the lowest score combining biodiversity sensitivity, impact score and dependency score.

# Avinor's material nature-related issues

Over the coming pages, Avinor's material dependencies, impacts, risks and opportunities are presented, with material risks and opportunities presented in more detail. Material dependencies and impacts are a result of the Evaluate phase of the LEAP assessment, while the material risks and opportunities are a result of the Assess phase.

For details on the process to identify dependencies, impacts, risks and opportunities as well as determining materiality, please refer to the [process description](#).

Results	4 material dependencies
	7 material impacts
	6 material risks
	1 material opportunity



# Avinor's nature-related dependencies

	Dependency	Explanation
<b>Dependencies</b>	Water purification	Avinor relies on microorganisms in soil and water that naturally break down de-icing chemicals from winter operations. Without this biological purification, these chemicals would accumulate, requiring more extensive infrastructure for collection and treatment, leading to higher costs and increased environmental and regulatory risk.
	Soil and sediment retention	Vegetation around airports stabilises soil and prevents erosion on flat areas and adjacent slopes. This reduces the risk of sediment runoff that could damage infrastructure, clog drainage systems, and degrade surrounding habitats
	Water flow regulation	Ecosystems that absorb, store, and gradually release water help maintain stable hydrological conditions around airports. This reduces flooding risks, protects infrastructure, and ensures reliable operations during heavy rainfall or snowmelt.
	Climate regulation	Airport operations rely on stable and predictable weather patterns to ensure safe flight schedules and efficient ground operations. Disruptions in climate regulation, such as extreme weather or temperature variability, can lead to delays, safety risks, and increased operational costs.

# Avinor's nature-related impacts






	Impact	Explanation
Impacts	Area of land use	Through operation and development of existing airports, and building of new airports, Avinor may impact and change land areas.
	GHG emissions	Through own operations, Avinor emits GHG emissions impacting the greenhouse effect.
	Leaching of PFAS from existing ground pollution	At Avinor's airports, there are sites contaminated with PFAS due to historic use of foam used in firefighting. PFAS leach from these sites into the surrounding environment.
	Light disturbances	Artificial light can interfere with natural behaviour for ecosystems and species such as migration, reproduction, and foraging.
	Microplastic	Microplastics, including small plastic fragments and shavings from snowplough blades, enter nearby ecosystems through runoff, affecting soil, water, and biodiversity around airports.
	Spread of invasive species	Invasive plant species have been detected at several Avinor airports. These invasive species can harm local nature and biodiversity by outcompeting native species, leading to reduced biodiversity or even extinction.
	Wildlife management	To maintain flight safety, Avinor implements bird and wildlife control measures, including culling and egg collection. These actions, together with collisions between aircraft and birds, result in mortality among several species, including some that are classified as threatened.

# Avinor's nature-related risks and opportunities at a glance

		Ahead of the game*	Sand in the gears*
<b>Physical risks</b>	As a result of more unpredictable snow and frost conditions and temperature fluctuations around the freezing point, challenging winter maintenance and operational disruptions may occur, which would lead to increased infrastructure demands and higher operational costs.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	As a result of the degradation of natural storm buffers combined with more frequent and severe storms, significant operational disruptions may occur, which could lead to increased maintenance requirements and higher costs.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Transition risks</b>	As a result of stricter environmental regulations on land use, constraints on new airport projects or higher compliance costs may arise, which could lead to delays in infrastructure development and increased financial pressure.	<input checked="" type="checkbox"/>	
	As a result of PFAS contamination, litigation and regulatory actions may occur, which could lead to increased operational and compliance costs.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	As a result of stricter environmental regulations on de-icing chemicals, expanded monitoring and infrastructure upgrades may occur, which could result in higher expenditures and operational complexity.	<input checked="" type="checkbox"/>	
	As a result of emerging policies and regulations on microplastics, compliance requirements for managing microplastic contamination in water, soil, and land may arise, which could lead to increased operational costs and monitoring obligations.	<input checked="" type="checkbox"/>	
<b>Opportunity</b>	As a result of air travel's high land-use efficiency relative to other transport modes, and when combined with environmentally friendly technologies such as electric aviation, Avinor may face a competitive advantage which could lead to strengthened positioning as a sustainable transport provider.	<input checked="" type="checkbox"/>	

\*Indicates in which scenario the risk/opportunity has been assessed as material

# Avinor's nature-related risks and opportunities (1/4)



	R/O CATEGORY	APPLICABLE SCENARIO	DESCRIPTION
 	Physical risk	<ul style="list-style-type: none"> <li>✓ Ahead of the game</li> <li>✓ Sand in the gears</li> </ul>	Unpredictable winter conditions, including variable snowfall, frost, and frequent temperature fluctuations around the freezing point, pose operational challenges for Avinor. These changes increase the complexity of winter maintenance, require more resilient infrastructure, and can lead to higher operational costs.
  	Physical risk	<ul style="list-style-type: none"> <li>✓ Ahead of the game</li> <li>✓ Sand in the gears</li> </ul>	Increasing storm intensity and frequency, combined with the degradation of natural storm-buffering ecosystems, pose a growing risk to Avinor's operations. Severe wind events and storms have already caused significant disruptions in recent years, affecting flight schedules, and infrastructure integrity. Projections indicate that storms will become more frequent and more intense over time, which could lead to higher maintenance costs, operational delays, and increased vulnerability of critical assets.

 Short time-horizon  
(2025)

 Medium time-horizon  
(2050)

 Long time-horizon  
(2071-2100)

## Avinor's nature-related risks and opportunities (2/4)




	R/O CATEGORY	APPLICABLE SCENARIO	DESCRIPTION
 	Transition risk	✓ <b>Ahead of the game</b> Sand in the gears	Increasingly stringent environmental regulations on land use present a growing risk to Avinor's ability to expand or develop airport infrastructure. As policies aimed at protecting nature become more rigorous over time, the cost and complexity of securing approvals for new projects are likely to rise, potentially limiting future development opportunities. While current impacts are limited due to the prioritisation of the social benefits an airport provides, this risk is expected to intensify as environmental concerns gain prominence, leading to higher opportunity costs for Avinor. Additionally, Avinor may face higher costs if future projects are required to provide ecological compensation for nature loss.
		✓ <b>Ahead of the game</b> ✓ <b>Sand in the gears</b>	PFAS contamination represents a significant liability risk for Avinor, as it may lead to litigation, regulatory actions, and associated financial penalties. Although Avinor has initiated soil remediation efforts to reduce contamination, the risk of lawsuits remains relatively high in the short term. The magnitude of this risk will depend on regulatory developments.

 Short time-horizon  
(2025)

 Medium time-horizon  
(2030)

 Long time-horizon  
(2050)

# Avinor's nature-related risks and opportunities (3/4)



	R/O CATEGORY	APPLICABLE SCENARIO	DESCRIPTION
 	Transition risk	✓ <b>Ahead of the game</b>  Sand in the gears	Stricter environmental regulations governing the use of de-icing chemicals are expected to increase compliance obligations for Avinor. These requirements may necessitate significant infrastructure upgrades and expanded monitoring systems to ensure proper handling and discharge of de-icing agents. Failure to comply could expose Avinor to liability risks, including fines and legal actions, particularly under more ambitious regulatory scenarios where nature-positive policies dominate.
	Transition risk	✓ <b>Ahead of the game</b>  Sand in the gears	Emerging policies and regulations on microplastics are expected to increase compliance obligations for Avinor, particularly in managing contamination in water, soil, and land surrounding airport operations. These requirements may necessitate enhanced monitoring systems and operational adjustments, leading to higher costs and added complexity in environmental management

 Short time-horizon  
(2025)

 Medium time-horizon  
(2030)

 Long time-horizon  
(2050)

# Avinor's nature-related risks and opportunities (4/4)

	R/O CATEGORY	APPLICABLE SCENARIO	DESCRIPTION
 	Opportunity	✓ <b>Ahead of the game</b>  Sand in the gears	Aviation require significantly less land compared to other transport modes, creating a potential competitive advantage as land-use efficiency becomes increasingly important for nature preservation. Air travel is inherently area-efficient, and when combined with environmentally friendly technologies such as electric aviation, it offers a more sustainable alternative to building extensive road or rail infrastructure, which demands large land areas and can fragment ecosystems.

 Short time-horizon  
(2025)

 Medium time-horizon  
(2030)

 Long time-horizon  
(2050)



# 04 Risk management

# Process description



# Avinor followed the TNFD's LEAP approach

Over the course of 2024 and 2025, Avinor identified and assessed nature-related **dependencies, impacts, risks and opportunities** (DIROs) through the LEAP approach recommended by the TNFD.

The approach follows the phases **Locate, Evaluate, Assess** and **Prepare**, as summarised to the right.

The primary focus of Avinor's LEAP assessment was on the first three phases, which involved the identification and assessment of nature-related DIROs.

## Locate

Locate Avinor's interface with nature.

Ensure that the assessment of impacts, dependencies, risks and opportunities is targeted to the most relevant areas of Avinor's operations.

### Steps:

- Screen activities in Avinor's own operations with potential impacts and dependencies on nature
- Define the interface with nature and identify sensitive locations

## Evaluate

Evaluate Avinor's nature-related impacts and dependencies.

Understand, measure and assess the impacts and dependencies of the company's activities on nature.

### Steps:

- Define impacts and dependencies to be assessed
- Define measurement indicators and thresholds
- Identify materiality for each activity and location

## Assess

Assess Avinor's nature-related risks and opportunities.

Identify risks and opportunities derived from impacts and dependencies on nature, and assess risks and opportunities through scenario analysis.

### Steps:

- Develop a longlist of nature-related risks and opportunities
- Prioritise and arrive at a shortlist of nature-related risks and opportunities
- Apply materiality criteria and thresholds

## Prepare

Preparation of the information that should be disclosed and how it is to be presented to the public.

Define frameworks and directives for which Avinor will report on nature.

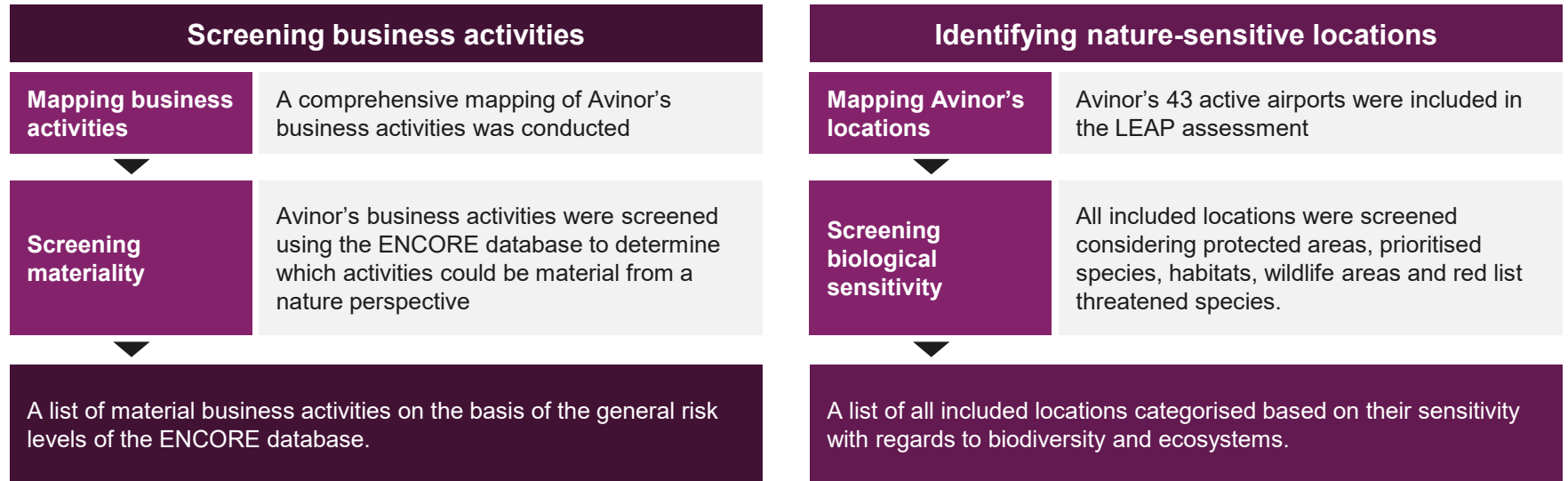
Define metrics to be used to report progress.

### Steps:

- Update Avinor's double materiality assessment with new insight from the LEAP assessment
- Report on nature-specific information through the TNFD's recommended disclosures

# Locating Avinor's interface with nature

The first phase of the identification of Avinor's nature-related dependencies, impacts, risks and opportunities followed two main tracks: Determining material business activities from a nature perspective, and categorising Avinor's locations based on their sensitivity with regards to biodiversity and ecosystems. This laid the groundwork for the assessment by establishing which business activities to explore further and an overview of nature sensitive locations.



# Evaluating Avinor's impacts and dependencies

The evaluation of Avinor's nature-related dependencies and impacts took a three-step approach. Firstly, material dependencies and impacts were defined using the [ENCORE database](#)<sup>1</sup>. Secondly, metrics were identified to evaluate dependencies and impacts across all locations. Thirdly, locations were given priority levels based on their dependency and impact scores combined with their nature sensitivity.

## Defining material dependencies and impacts

Based on Avinor's material business activities, a list of material dependencies and impacts was determined using the risk levels from the ENCORE database. Some risk levels were adjusted based on expert insights to reflect the local context.

## Identifying metrics to assess each location

For all material dependencies and impacts, one or more metrics were identified in order to evaluate impacts and dependencies across all locations included in the assessment.

## Prioritising locations

Each location was scored across the material dependencies and impacts using the identified metrics. The locations were then prioritised based on their overall dependency and impact scores combined with the nature-sensitivity categorisation from the Locate phase.

### Material dependencies and impacts

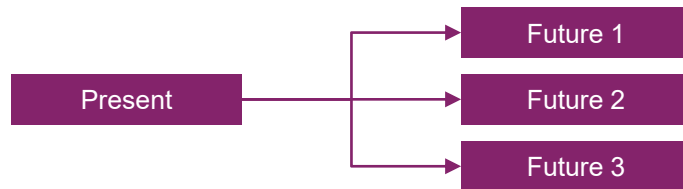
<b>Dependencies</b>	Water purification	Soil and sediment retention	Water flow regulation	Climate regulation
<b>Impacts</b>	Area of land use	GHG emissions	Leaching of PFAS from existing ground pollution	
	Light disturbances	Microplastics	Spread of invasive species	Wildlife management

<sup>1</sup> The ENCORE database was developed by Global Canopy and UNEP to serve as a useful entry point to nature-related assessments, such as the TNFD framework

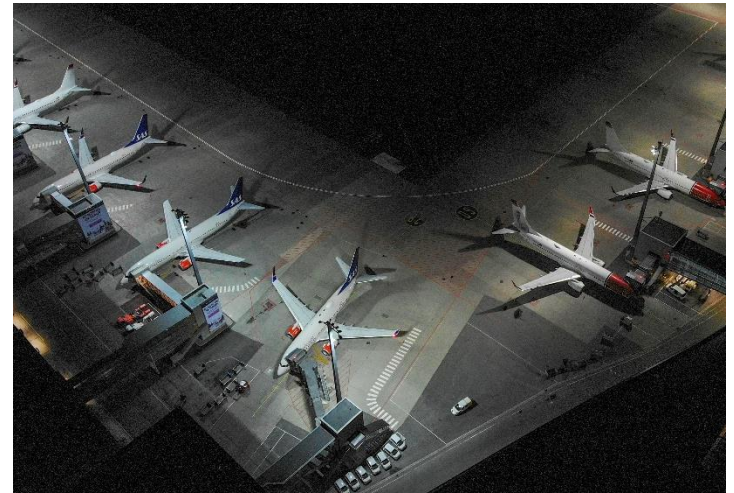
# Risks and opportunities were assessed across scenarios

A scenario outlines a plausible yet hypothetical pathway leading to a specific future outcome. Rather than assigning probabilities, scenarios serve as “what-if” narratives designed to inform and challenge strategic thinking. They do not aim to provide a complete picture of the future but instead highlight key elements of a possible future. In nature risk assessments, scenarios help assess a company’s exposure to critical uncertainties, such as ecosystem service degradation and the interplay of market and non-market driving forces. Compared to climate scenarios, the nature scenarios are less developed and rely on more qualitative descriptions. They nonetheless serve as useful lenses through which risks and opportunities can be assessed.

Many different factors influence how nature and socio-economic developments will change over the coming decades, and risks and opportunities will play out differently depending on this development. To account for this uncertainty, Avinor assess the consequences, likelihood and financial magnitude of risks and opportunities in two different scenarios.



Different pathways leading to different plausible futures

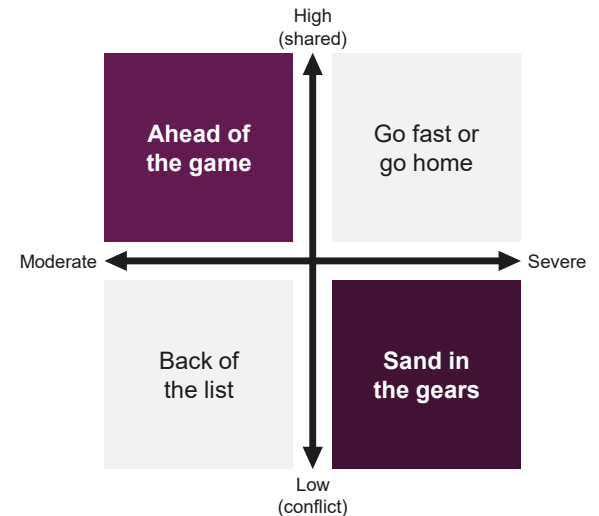


# Avinor's chosen scenarios

In order to create challenging “what-if” analyses and capture a wide range of assumptions about uncertain futures, the TNFD recommends considering two [scenarios](#). Therefore, the nature risk assessment is based on two sufficiently diverse scenarios; one scenario with high market alignment and moderate ecosystem degradation, and another scenario with low market alignment and severe ecosystem degradation. Both scenarios are developed by the TNFD.

The chosen scenarios are aligned with the [climate scenarios](#) developed by the IPCC used in Avinor's climate risk assessment to ensure compatibility across the risk assessments and enable a streamlined approach to managing identified risks and opportunities.

Scenario	Scenario name	Description
1	Ahead of the game	<b>High alignment of market and non-market forces and moderate ecosystem service degradation</b> Progress in carbon policies supports nature-positive outcomes, but low experienced loss and limited evidence create scepticism and challenge organisations to lead.
2	Go fast or go home	High alignment of market and non-market forces and severe ecosystem service degradation
3	Sand in the gears	<b>Low alignment of market and non-market forces and severe ecosystem service degradation</b> Environmental assets decline rapidly, but political and financial complexities hinder systematic action, leading organisations to focus on short-term fixes and externalise costs, widening the developed-developing economy divide.
4	Back of the list	Low alignment of market and non-market forces and moderate ecosystem service degradation



# Scenario assumptions: Ahead of the game

Global climate risks and successful carbon policies foster consensus for proactive environmental action, with significant investments in nuclear power and retrofitting driving momentum for nature-positive initiatives. Consumer demand for transparency grows, social movements expand, and stabilised economic conditions make nature-positive investments plausible, as political authorities seize this opportunity.

## Policies come into force

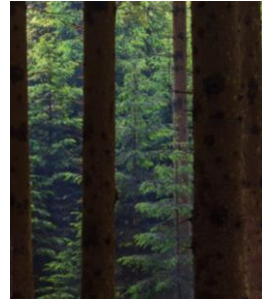
A few seemingly impossible policies come into force, such as a carbon tax in the US, rise of nuclear power in Northern Europe and retrofit of housing with electric heat pumps in China:

- Surprising degree of consensus driving coherent policies globally
- Reinforced momentum for investment spilling into nature investments

## Nature focus

Societal and financial pressures to advance the nature agenda ahead of actual experienced loss:

- Demand for nature impact transparency
- Large global businesses lead with both carbon and nature scope integrating in their business models



## Decline in energy intensity

As economies use energy more efficiently, impacts on nature become more concentrated:

- Impacts increasingly occur in a smaller set of industrial sites (e.g., data centers and production/recycling facilities)
- This concentration makes impacts easier to identify, quantify and address.



## Macroeconomic stability

The global macroeconomic environment stabilizes as post-pandemic inflationary pressures are worked through:

- Interest rates return to mid 2010s level
- Returns on forward-looking nature-positive investments seem broadly plausible

# Scenario assumptions: Sand in the gears

Conflicting signals and diverse regional issues hinder corporate action on nature asset loss, despite significant impacts from ecosystem service degradation. Scientific complexity, lack of standardised disclosures, and uneven economic effects stall progress, with attention and resources disproportionately focused on carbon reduction over nature-related technologies.

## Incoherent policy responses

A lack of coherence in signals, from everything other than the natural environment itself, has different root causes in different political jurisdictions and could include:

- Shift of focus from nature to maintaining carbon discipline in Europe
- Focus on achieving economic growth following recession in Asia
- Backlash against ESG investing in the US

## Nature modelling issues

The scientific community may inadvertently contribute to a lack of coherence through:

- Overly complicated and indeterminate models, or
- Oversimplified models for political impact



## Low data quality

Low data availability and quality, and a lack of agreement on standardised disclosure guidance form financial institutions:

- Frustratingly slow progress
- Focus turns to short term acute risks rather than long term systemic action



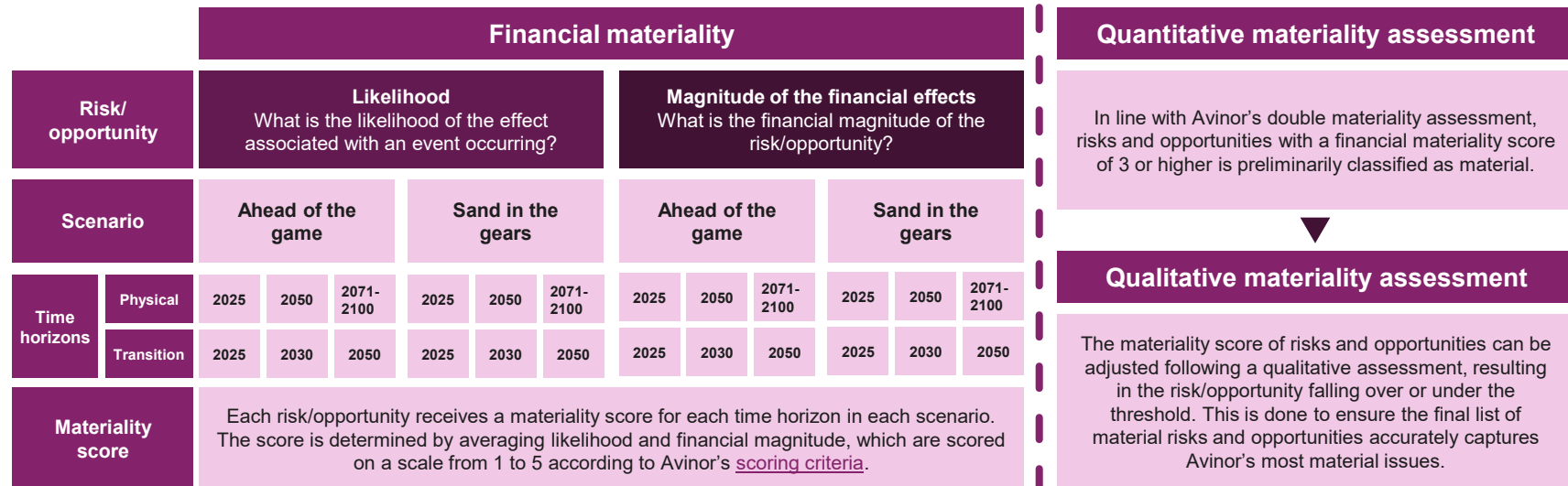
## Uneven ecosystem service loss

The impact of ecosystem service loss is spread unevenly across economic sectors:

- Lack of focus on nature due to low macro impact
- This may change near the end of the decade as nature loss impact becomes more visible

# Assessment of nature-related risks and opportunities

Avinor assesses nature-related risks and opportunities in accordance with the criteria set out by the TNFD and the ESRS. All risks and opportunities have been assessed across two scenarios and three time horizons. The assessment largely follows the same methodology as the climate risk assessment. Physical risks have been assessed over longer time horizons than transition risks as Avinor's capital investments have a longer lifespan.



# Scoring criteria for nature-related risks and opportunities

Avinor's assessment of nature-related risks and opportunities is based on two scales ranging from 1 to 5, representing likelihood and financial significance for the defined time horizons. The scoring was conducted by Avinor's internal experts, starting with a long list that was gradually narrowed down through the process to identify potential material risks and opportunities in the context of the selected scenarios. When assessing likelihood, Avinor focuses on the probability of the financial impact associated with the event occurring, rather than solely the likelihood of the event itself happening.

## Likelihood

Financial risk/opportunity	
Score	<i>Likelihood that the effect of the risk/opportunity occurs</i>
1	Unlikely
2	A little likely
3	Medium
4	Likely
5	Very likely

## Financial magnitude

Financial magnitude	
Score	<i>Loss of revenue or cost increase // potential added revenue for opportunities</i>
1	Negligible
2	Minor
3	Moderate
4	Major
5	Critical

# Process for managing nature-related dependencies, impacts and risks



# Avinor's approach to nature and biodiversity

Avinor has worked on integrating nature considerations in overall planning and operations over time. This includes both land use and impacts arising from Avinor's activities, such as pollution, de-icing and handling of chemicals, in order to reduce the pressure on ecosystems. The first management plan to safeguard natural values was prepared for the hay meadows at Kristiansand Airport in 2008. Professional biologists have since conducted field surveys to examine biodiversity in relation to all airports managed by Avinor. The reports are available at Avinor's website.

Avinor has established systems to assess its impacts on biodiversity and ecosystems in development projects, and in 2023, its climate and environment strategy 2023-2025 was updated to include specific targets for nature-positive measures. The work to further strengthen Avinor's approach to nature risk management is a continuous project, and the LEAP assessment and this report have been important measures to that end. The findings from the LEAP assessment and this TNFD report provided important input to Avinor's Climate and Environment Strategy 2026-30.

*Avinor's Climate and Environment Strategy 2026-2030 is available at [www.avinor.no](http://www.avinor.no).*





# 05

## Metrics and targets

# Avinor tracks nature progress through metrics and targets

Avinor is committed to minimising nature impacts through responsible practices across the value chain and will evaluate progress on an annual basis to strengthen actions against nature loss. In the Climate and Environment Strategy 2026-2030, Avinor has defined three overarching targets that will guide the company's continued work on nature and biodiversity.

	Own operations		Value chain
Target	No developments will negatively impact areas of national or significant regional ecological value.	By 2030, at least 30% of airports will have restored or initiated restoration of natural areas, or have implemented at least one measure to positively impact biodiversity in or around the airport.	Ensure that procurement and supply chain actors support biodiversity conservation and do not contribute to deforestation or ecosystem degradation.
Measures	<ul style="list-style-type: none"> <li>Apply the mitigation hierarchy, alternative assessments, and knowledge of natural values early in planning, projects, and operations.</li> <li>Conduct and document alternative assessments early if impacting nature of national or significant regional value and prioritize them in decisions.</li> <li>Prepare land-use accounts for relevant plans, projects, and Avinor as a whole</li> </ul>	<ul style="list-style-type: none"> <li>Identify suitable areas for restoration or positive measures at each airport.</li> <li>Map invasive harmful species, prevent their spread during construction work, and implement measures where the risk is greatest.</li> </ul>	<ul style="list-style-type: none"> <li>Set requirements in procurement and contracts that promote deforestation-free value chains</li> </ul>
Metrics*	<ul style="list-style-type: none"> <li>Area (decares) with high biodiversity or ecological value (national or regional significance)</li> <li>Area (decares) affected by land-use change or other material interventions</li> </ul>	<ul style="list-style-type: none"> <li>Share of airports with restoration measures implemented or positive biodiversity measures completed</li> <li>Share of airports that have mapped invasive species</li> </ul>	<ul style="list-style-type: none"> <li>Share of contracts with relevant sustainability requirements</li> </ul>

\*Please see i.e Avinor's [annual report](#) for the latest updates on the company's progress.



# 06 Next steps

# Avinor continues its commitment to nature and biodiversity

Going forward, Avinor's priority is to integrate safe and efficient operations with strong nature considerations, supported by transparent reporting on impacts and progress. The new climate and environment strategy provides a strong platform for Avinor to accelerate nature-positive initiatives and support national targets to restore 30% of degraded nature by 2030.

Building on insights from the LEAP assessment, Avinor will further advance its approach to addressing nature-related dependencies, impacts, risks, and opportunities in a holistic way, ensuring resilience and long-term value creation. Going forward, Avinor will place high priority on its efforts to integrate nature considerations in overall business strategy and operations, whilst not compromising on passenger safety.

## Understanding nature issues in the value chain

As Avinor's nature work continues to increase in maturity, the company will consider expanding its LEAP assessment to cover its upstream and downstream value chain.

## Continuing efforts to mitigate nature risks

Avinor has already implemented plans and actions to mitigate risks and negative impacts related to PFAS, microplastics, climate and land use. The company will continue to iterate and strengthen these efforts as knowledge about their relationship with nature and biodiversity develops.

## Integrating nature in overall strategic planning

Avinor will integrate identified nature risks and other relevant insights from the LEAP assessment in the company's strategy and governance structures. These efforts will help the company progress towards its nature-related targets.

