

Impact of resource rent tax – onshore wind power

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1 February 2023





Recipients

This report is commissioned by several wind power companies; among them are Aneo, Aquila, EIP (Energy Infrastructure Partners), Luxcara, Prime Capital, Susi Partners, and Taaleri

1 February 2023

Tax modelling and analysis of the effects of the proposed resource rent tax for onshore wind

As agreed we provide you with our report regarding the effects of the resource rent tax proposals on the onshore wind industry in Norway. Our report is released to you solely for your purpose as described in our Engagement Letter dated 18 October 2022. We have consented to the report being made public.

In preparing this report, our primary source of information has been information provided by the Client and its members. We do not accept responsibility for such information, which remains the responsibility of the Client. Representatives of the Client have reviewed and confirmed the factual accuracy of the report. This report is not an investment advice. The conclusions may be subjective and dependent on the exercise of individual judgment. KPMG has no obligation to update, amend or revise the report at any time.

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Our report makes reference to "KPMG analysis". This indicates that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented; we do not accept responsibility for the underlying data. This analysis is based on prevailing market, economic and other conditions at the date of the report. To the extent possible, we have reflected these conditions in our analysis. However, the factors driving these conditions can change over relatively short periods of time.

Kind regards.

Thor Leegaard

Partner





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01 Summary



The proposal is insufficiently scrutinized and has serious adverse implications on Norwegian renewables

Our analysis indicates that assumed super profit for onshore wind producers is not substantiated

- **Lack of super profits.** The governments proposal is based on the assumption that the onshore wind industry is earning extraordinary high profits. Our analysis indicates that resource rent taxation of onshore wind power to a large extent will be an increased tax on ordinary business profits. More than half of existing wind parks are backed by long term power purchase agreements aimed at securing a low but stable return for financial investors.

Our analysis indicates a lack of tax neutrality in the proposed tax

- **Extra tax on ordinary profits.** The proposal would lead to a significantly higher tax cost for onshore wind power with ordinary business profits, compared with other industries. The higher tax comes in addition to the windfall tax on high energy prices.
- **The proposed tax is higher than for hydropower.** Unlike the resource rent tax on hydropower production, the tax value of negative resource rent will not be credited.

The effect on investors and offtakers risk delaying or hindering future investment in renewable energy

- **Effects for investors.** Our analysis indicates a major negative impact on the equity for investors, with a risk of multiple wind farms going into default.
- **Effects for offtakers.** Defaulting wind farms would lead to termination of existing long term power purchase agreements, resulting in uncertain and potentially higher power prices for counterparties in power intensive industries.
- **Deteriorating competitiveness.** Our review shows that a stable tax regime has been instrumental in driving the development of onshore wind farms across the Nordics. Significantly higher taxes in Norway may delay or hinder future investments in green energy.

The proposed tax will severely hit ordinary business profits and is likely to negatively impact future investment in renewable energy

Proposed resource rent tax on onshore wind power

The Norwegian government proposed tax hike for onshore wind power that includes increased production taxes, a windfall tax and a resource rent tax at an effective rate of 40% in addition to corporation tax at 22%. The resource rent tax is intended to be modeled on the resource rent tax for hydro power, but with a number of modifications making the tax more burdensome and less neutral for wind power.

For hydro power, the tax value of negative resource rent income is paid to taxpayers. In addition, hydro power is sheltered from resource rent tax on ordinary profits (uplift). It also benefits from more extensive exceptions for pricing under long term contracts, rather than having the tax base determined on the basis of spot market prices.

The proposal was introduced at a press conference on 28 September 2022 and intended to be effective from 1 January 2023. The September 2022 proposal was very high level, with details to be determined during the further public and political process. A white paper for public hearing is expected in December 2022 with the final adoption of legislation expected only during the first half of 2023. This unorthodox (and unprecedented) process has created significant market disruption and uncertainty.

Our analysis shows that there are severe flaws in the objectives of the proposals both in terms of identifying super profits, the effect on the industry, off-takers and banks as well as on the future development of renewable energy and energy prices.

No super profit and significant loss on invested equity for existing projects

The current proposal does not substantiate whether there is a super profit in the production of onshore wind power.

More than 50% of existing project are financed through long term power purchase agreements (PPA) securing a low and steady revenue, hence there is no super profit justifying an additional tax. Considering that investments in existing projects ("Brownfield projects") are not fully deductible in the resource rent tax base the proposal is in practice targeting ordinary business profits.

Part of the reasoning from the government is an observation of the currently very high energy prices. This has resulted in time limited windfall taxes in a number of countries, including Norway. By introducing resource rent tax in addition to the windfall tax, the Norwegian approach to addressing high energy prices is very different from other comparable jurisdictions.

The proposed resource rent tax is not neutral

The hydro power taxation model has been improved through the years to become tax neutral, allowing effective deductions for all relevant cost. An important remedy was to allow reimbursement of negative resource rent tax replacing a carry forward mechanism.

For onshore wind power production, the government has instead proposed a carry forward mechanism. The introduction of the reimbursement for hydro power was specifically aimed to ensure that the resource rent tax is neutral. Reimbursing the tax value also fits the role of the government being a passive investor collecting 40 % effectively of the profits rather than making an additional tax charge without taking part in the risk.

Effect on future investments in renewable energy

The level of tax and incentives have historically proven to have a significant effect on new investment in wind power, as shown from the experiences especially in Norway and Sweden. Finland and Sweden have very ambitious goals for new renewable energy production and have a more favorable tax environment to attract investments. Introducing a heavy tax burden on onshore wind power in Norway is unlikely to incentivize new investment.

The proposal for resource rent taxation does not extend to offshore wind and the government has recently stated that there at present are no super profits in this sector. However, the government has indicated that resource rent tax on offshore wind power production will be subject to evaluation. These signals combined with the present tax proposal for onshore wind may significantly reduce the interest also for offshore wind investments.

Tax proposal – implications for investors and offtakers

Methodology

- The implications of the proposed resource rent tax presented in the following are based on interviews with key players in the Norwegian onshore wind industry.
- The interviews were conducted between 28.11.2022 and 02.12.2022 by KPMG.
- Please note that the described views do not necessarily reflect the views of KPMG.
- **The following companies have been interviewed:**

Investors



HITECVISION



PRIME
CAPITAL



Implications for private sector investment and further expansion of the renewables sector industry

- Reduction in cash flows due to the tax proposal will have severe implications for the financial viability of onshore wind farms in Norway. Cash flows derived in the proposed tax regime will, for some, not suffice to service debt obligations, pushing some projects into default. Breach of covenants in debt agreements may also be widespread. Inability to service debt obligations appears to be true for many foreign direct investors.
- Regardless the risk of default or breach of covenants, it is evident that the tax proposal will have adverse implications for investors in onshore wind in Norway as a whole by seriously undermining the investments which have already been made at substantial initial risk but delivering only low profits.
- In turn, defaulting projects can lead to lending banks having to take over wind farms with resulting losses on loans, damaging the appetite to finance future projects in Norway.
- The tax proposal will cause an increase in both the levelized cost of energy (LCOE) and political risk, that in combination neither supports viable operations for existing wind farms nor future investments.
- As such, there is a real risk of major reduction in, or even a total halt to, further investment in Norwegian renewable energy, particularly onshore wind, in the short- to medium-term future.

Implications for offtakers (i.e. energy-intensive industries)

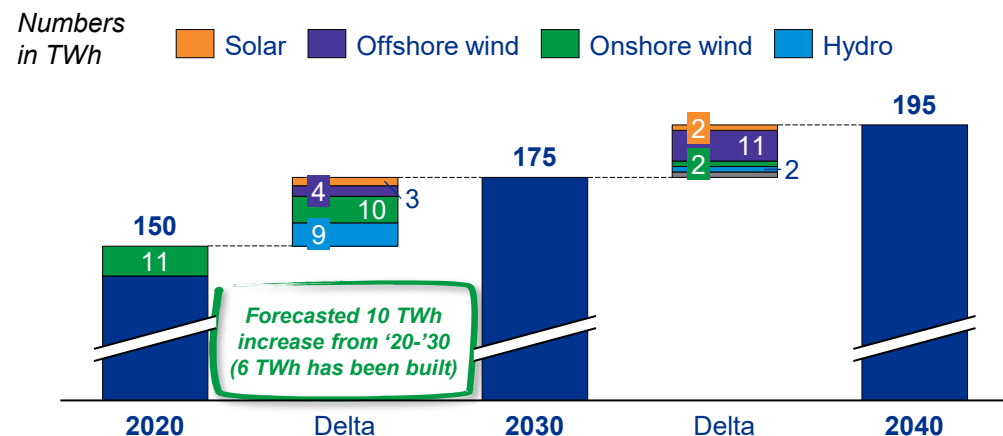
- In turn, the knock-on effect on offtakers is a risk of termination of existing PPA's and a deterioration in the future market for competitive and long-term PPA's.
- This leads to a severe risk for future access to renewable energy at viable prices, which is pivotal for Norwegian energy-intensive industry players.
- Moreover, higher electricity prices may hinder climate action plans for existing industry and investments in new green industry.

Implications for electricity price and perceived gap in supply

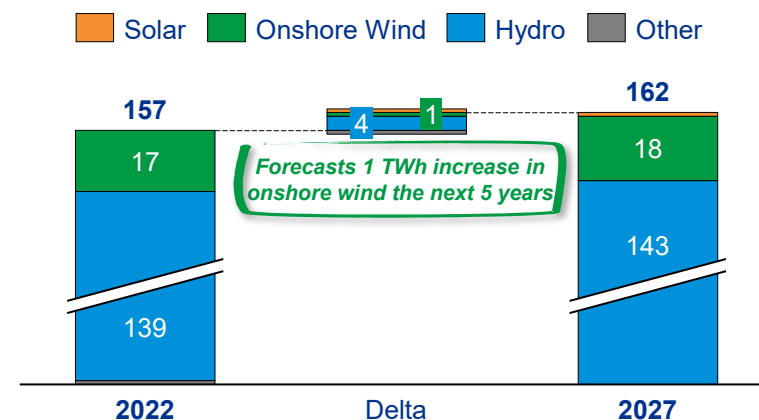
- The proposed tax regime is likely to result in an increase in electricity price due to higher LCOE, and reduced supply of renewable energy due to reduced investment activity...
- ...this will in turn reduce Norway's energy surplus – already heading towards an energy gap by 2027 – raising the prospect of higher domestic prices, particularly if higher-price electricity must be imported from connected markets.
- Finally, the proposal may have a major negative impact on Norway's renewable energy development goals, such as 30 GW from offshore wind in 2040.

The tax proposal is likely to entail revision of the energy outlook

Statnett's long-term basis prognosis on electricity production
(updated spring 2021 - prior to the tax proposal)



Statnett's short-term basis prognosis on electricity production
(published November 2022 – after the tax proposal)



Implication on outlook following the resource rent tax proposal

From the long- and short-term prognosis, it is evident that hydro power is expected to contribute until 2030, but with a stagnating trend thereafter. For onshore wind, energy volume was expected to increase to 21 TWh in 2030. However, the short-term prognosis displays a stagnation in new onshore wind energy volume. Taking both prognosis into account, it is evident that a somewhat optimistic outlook, displayed in the long-term report published prior to the tax proposal, is confronted with a more pessimistic sentiment displayed in the recent report, published after the tax proposal, and with an ongoing war in Ukraine and an energy crisis.

In turn, the result is an expected deficit in the energy balance already in 2027, substantiating the importance of investment in, and the development of renewable energy.

Taking the above-mentioned and the tax proposal-effects into account, the projected new energy production from onshore wind towards 2030 are at risk, resulting in higher electricity prices and reduced investments from energy-intensive industry. What is more, hydro power is also subject to the proposed tax regime, suggesting that projected new energy from hydro also ought to be revised downwards.

On long-term, offshore wind is expected to be a key contributor to new energy production. However, the tax proposal may limit investments in offshore wind due to political risk and investor reluctance. Thus, the projected new energy production from offshore wind ought to be revised downwards, causing higher prices on the longer-term.

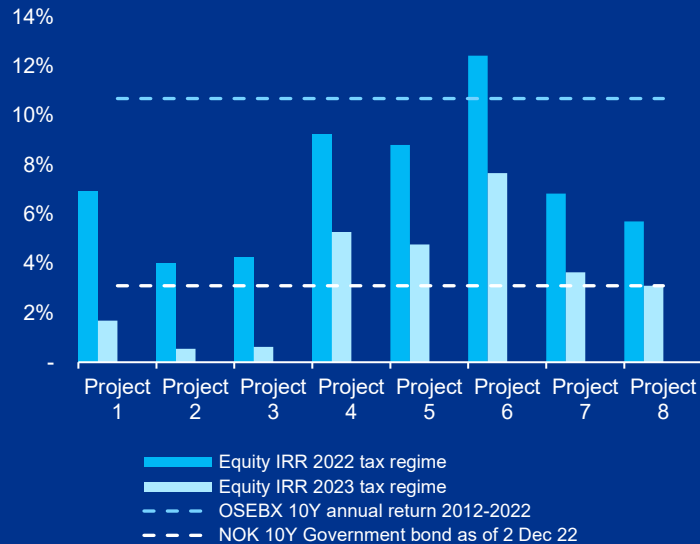
Commitments to climate action largely relies on the feasibility of electrifying existing industry and development of new green industry. Thus, higher electricity prices, reduced availability of renewable energy, as a result of the proposal, may cause a slow-down in the pace of the green transition.

Source: Statnett Long-Term Market Analysis 2020-2050 (updated spring 2021), Statnett Short-term Market Analysis 2022-2027, Interview program conducted by KPMG

The tax proposal will lead to default for many existing projects

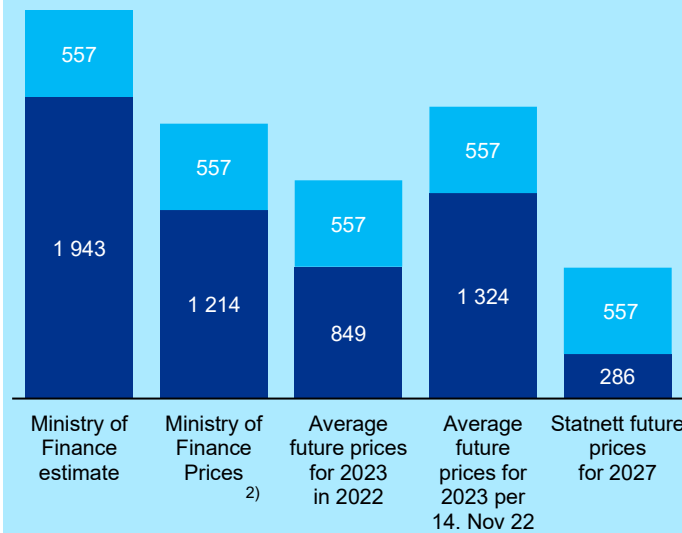
No super profit and significant loss on invested equity for existing projects

Analysis of eight wind projects indicates no super profit before the tax proposal with internal rate of returns (IRR)¹⁾ significantly below Oslo Stock Exchange ten year annual return in the period 2012 to 2022. The tax proposal reduces nearly half of the IRRs below a NOK 10-year government bond as of 2 December 2022, which results in significant loss on invested capital. This analysis is before taking into account the increased cost of debt and increased cost of additional equity due to the tax proposal, which is expected to reduce the IRR for existing equity investments further.



The calculated tax proceeds from the Norwegian wind industry for 2023 is lower than what the Ministry of Finance have assumed

■ Excise duty on production and natural resource tax (NOKm)
 ■ Net tax proceed* (NOKm)

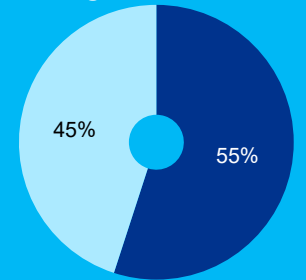


* Net tax proceeds is defined as the tax proceeds from the resource rent tax less excise duty on production and natural resource tax

Offtakers of PPAs capture the main part of the profit from increasing prices and not the wind power project as they are obliged to sell below market price

55%

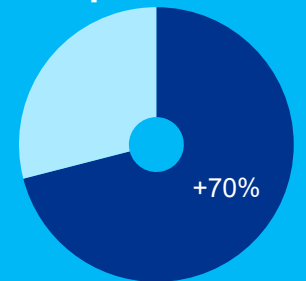
Of yearly production is assumed sold via PPAs



Norwegian wind farms are to a large extent owned by long-term financial investors who have been able to purchase the projects in a competitive market assuming stable cash flows with low return on invested capital

+70%

Of installed capacity is owned by long-term financial investors



1) The internal rate of return (IRR) is a measure of the return on an investment or project. It is the expected compound annual rate of return that will be earned on a project or investment.

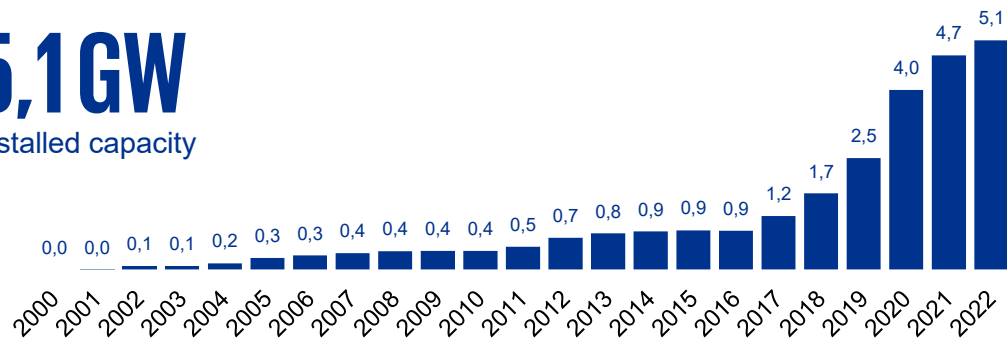
2) The "Ministry of Finance Prices" scenario is based on KPMG's assumptions combined with the power prices that is applied by the Ministry of Finance in its estimate

02 The onshore wind industry in Norway

Norway is among the countries in Europe with the best wind resource

5,1 GW

Installed capacity



16.9 TWh

Production in a normal year

64

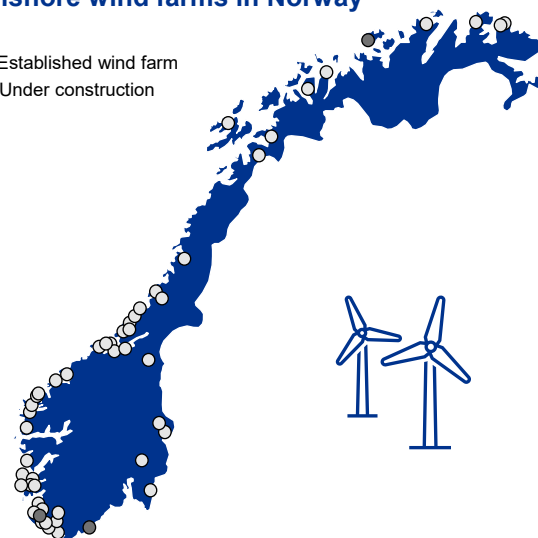
Wind farms

1,386

Number of turbines

Onshore wind farms in Norway

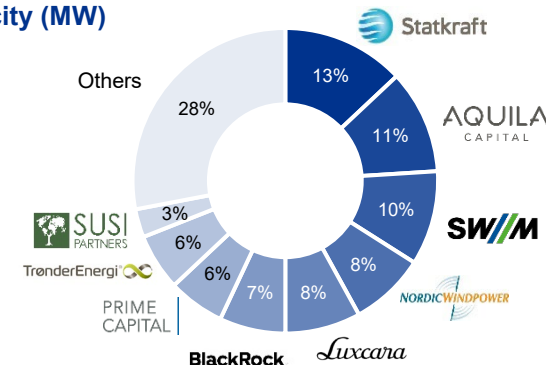
- Established wind farm
- Under construction



Some drivers of the development in Norwegian onshore wind industry

- In recent years, rapid technological development has led to land-based wind power being competitive with conventional, thermal power production in the vast majority of markets
- Norwegian wind power is, due to our very good wind resources, the cheapest new form of power in Europe available on a large scale.
- The electrification of society and industry has and will increase the need for power in Norway. It is estimated that extensive electrification will increase electricity consumption in Norway by 40 TWh in 2030 from 2022. New establishment of power-intensive industry can result in a further 30 TWh in increased electricity consumption
- Investors have been drawn towards renewable energy sources, partly because of historically low interest rates and demands for sustainable investments.

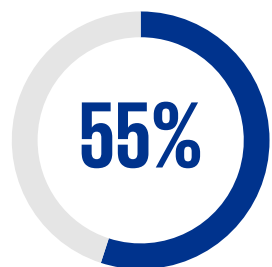
Market share of major onshore wind owners¹⁾ in Norway based on installed capacity (MW)



Notes: 1) Based on installed capacity multiplied by the companies' ownership in the wind farm

Sources: NVE, KPMG Analysis

A large portion of Norwegian onshore wind parks have been made possible and financed with corporate PPAs

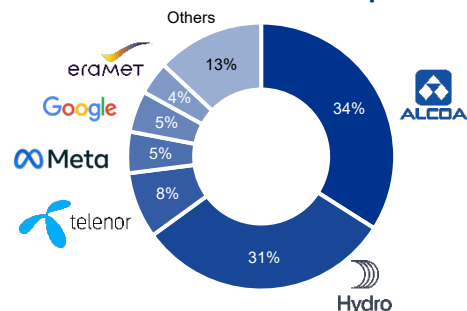


Of yearly production is assumed sold via PPAs

What are PPAs?

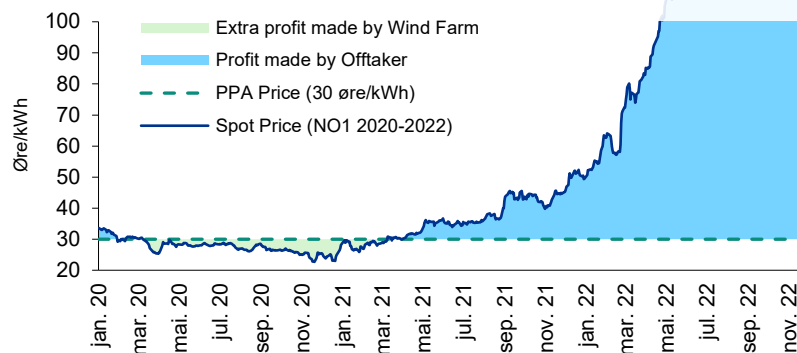
- A Power Purchase Agreement (PPA) is a contract between an electricity generator and a power purchaser (“offtaker”).
- Typical duration is 10 to 25 years.
- The terms of the agreement usually include the price of the electricity, the amount of electricity to be delivered, and the schedule for delivery.

Indicative market share of Corporate PPAs



The PPA market is dominated by large Norwegian industrial leaders, imperative for the Norwegian economy. The offtakers have entered into PPAs at favorable prices and been the main beneficiaries during times with high power prices.

Simplified example of profit split between wind farm and offtaker on a PPA contract¹⁾



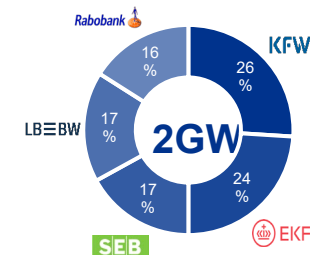
PPAs have been important for realizing projects

- The renewable energy sector relies heavily on PPAs to finance projects as they provide a stable source of revenue that can be used to secure financing for the construction of new renewable energy facilities.
- Electricity prices and wind speeds can fluctuate greatly, which means that it is difficult to predict how much revenue a wind farm will generate over a given period of time.
- Therefore, having a PPA in place to secure the revenue stream for a project is often necessary to achieve debt and equity financing. Without PPAs it will be difficult to build new facilities and increase the overall supply of renewable energy.

Foreign project finance banks have financed almost 2GW of the operating onshore wind farms in Norway

- Project financing is not only important for onshore wind development but across the wider infrastructure class.
- Defaulting on project financing due to changes in taxation might damage Norway’s reputation and increase the cost for future wind and infrastructure projects.

Indicative market share of international lenders



Notes: 1) In the example it is applied a PPA Price of 30 øre/kWh (green dotted line) which is in line with our observations. The spot price is the actual spot price for price area NO2 (blue line). Every time the spot price is above the PPA price, as represented by the blue shaded area, the offtaker benefits from the PPA as they can purchase the power at a lower cost than the current market price. When the spot price is below the PPA price, the wind farm benefits from the PPA as the power is sold above the market price.

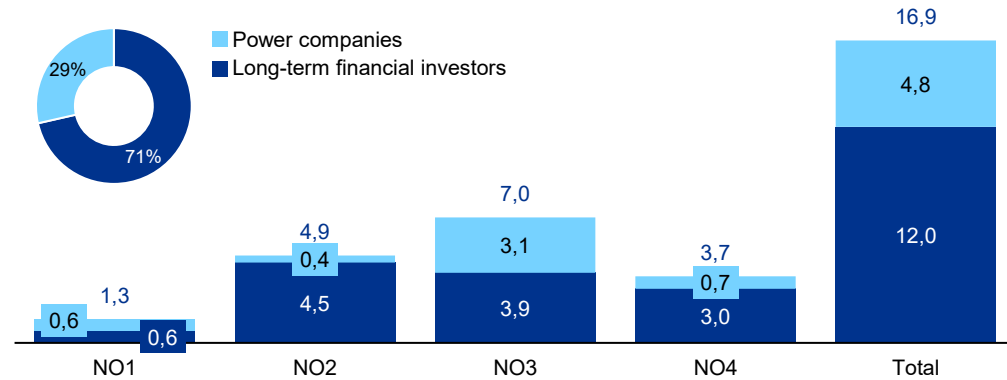
Sources: Augusta & Co, Montel, NVE, KPMG Analysis



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Norwegian wind farms are to a large extent owned by financial investors who have purchased the projects based on low IRR assumptions

Power production (TWh) from Norwegian wind farms in 2023 split between power companies and long-term financial investors

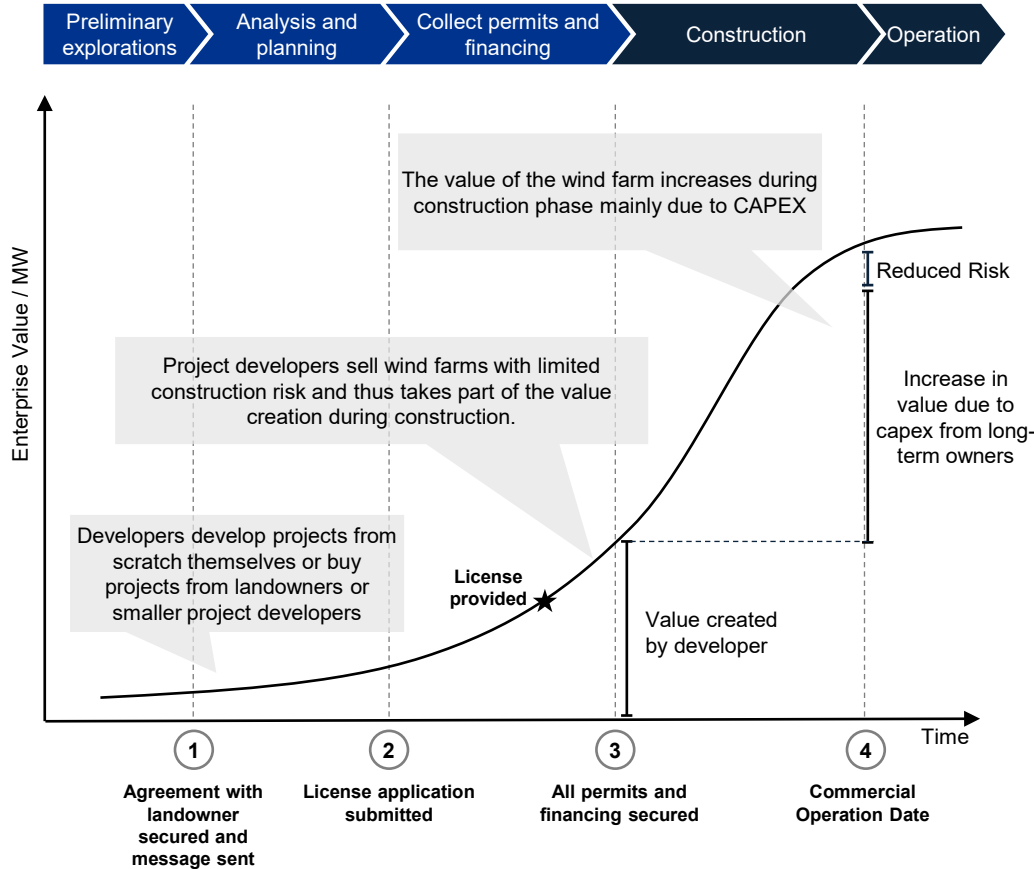


Long-term financial investors

- The long-term financial investors have mainly entered the projects at a stage where the highest bidder has purchased the project based on low IRR assumptions. The financial investors, have made long-term investments in the Norwegian wind sector based on the expectation of stable returns and market condition and low risk.
- Investment decisions from current investors have been made on incentives from the Norwegian government adopted years ago. In 2015, the Norwegian government introduced accelerated tax depreciation rules for wind power assets, leading to increased profitability for the producers. The favorable depreciation rules was phased out as of year end 2021 and the investments made after 2021 have been subject to the ordinary depreciation rules.
- Normally, the operating expenses are locked in fixed contracts and large parts of the revenues are secured through power purchase agreements (“PPAs”). As such, the potential benefit from the increase in power prices is significantly reduced and the expected returns are generally moderate with no potential for super-profit.

Most of the value creation is received by the developer while the long-term owners receive a small but stable return on their investment

Illustration of value creation for onshore wind farms



Value creation for onshore wind farms

- Developers generate value by connecting input factors that are low in value individually. They transform areas with potential for wind-power production into ready-for-sale projects with necessary permits from landowners, governments and network companies, fully designed wind farms, agreements with turbine suppliers and suppliers of other electronic components and agreements with contractors.
- Long-term owners of wind farms generate value by providing capital during the construction phase. Buyers of wind farms get a «bond» where current expenses like maintenance and operation of the farm is locked in fixed contracts and big parts of the revenues are secured through long power purchase agreements («PPAs»). This is an attractive product for infrastructure and pension funds.
- Several established parties have realized the value potential in the developers part of the value chain. On Statkraft's website, it says that Statkraft will step up its role as developer of wind and solar power to utilize the large value creation in the development phase.

03 Implication for investors and offtakers

The proposed resource rent tax has adverse implications for both existing and future investments from private sector investors in onshore wind

Existing wind farms are risking significant reduction in IRR

- As a whole, onshore wind investors will likely experience cash flows reduced to a level that is not compatible with viable operations and normal rate of return. Many onshore wind farms that have debt financing will struggle to derive cash flows in the proposed tax regime that are sufficient to service their debt obligations.
- Furthermore, for some wind farms, the great majority of production is on PPA's, and therefore locked in at specific prices for a longer period. These PPA's are contracted, and there is little to no room for re-negotiating the terms on these long-term agreements with industrial offtakers.
- OPEX are already reduced to its minimum and one cannot physically move the wind farms.
- What is more, private sector investors argue that the actual trajectory for LCOE levels for onshore wind do not coincide with those envisaged by government, noting that electricity prices throughout the lifespan of wind farms, due to the proposed tax, combined with updated costs, must stay at levels that are very much unrealistic for projects to be feasible.
- It follows that many wind farms will indeed experience severe reduction of cash flows, struggle to pay their debt obligations, and are thus subject to default risk. In order to avoid default, investors must either inject more equity or re-negotiate terms with creditors. This may not be feasible as financing costs will increase, thus reducing the IRR of the projects.

Conclusively, the proposed resource rent tax may result in significant reduction in IRR's for many wind farms, and a risk of default for some.

Higher levelized cost of energy (LCOE)

- The proposed resource rent tax results in higher levelized cost of energy. In turn, this suggests that the price for those who offtake the energy must increase accordingly if the investment rationale is to remain unchanged.
- Investment decisions from private investors are undertaken with an international evaluation of profitability. As the price on energy a Norwegian wind farms must achieve to be profitable will increase, it is likely that investments will be skewed towards more competitive markets outside of Norway.
- Furthermore, it is not given that industrial offtakers on PPA's, being important to secure project financing for some wind farms, deem higher factor prices competitive, in which this amplifies the notion that private capital will no longer view Norwegian onshore wind as an attractive investment.

An increase in political risk

- When investors undertake investment decisions on capital allocation with a long-term (20-30) year perspective, they may deem the Norwegian political instability and unpredictability to high. In turn, suggesting a deterioration in foreign investments.
- This is particularly true for foreign investors, often comprised of institutional capital (e.g. pension funds), as these are risk averse.
- Political risk is all-encompassing, possibly harming investor interest in offshore wind.

The financial and political risk combined will likely reduce investments in new development projects, not only in onshore wind, but across industries (e.g. offshore wind).

Onshore wind farms that are operative are facing risk of default, and one can assume a significant reduction, if not total abolishment of private investor willingness to invest in the development of new onshore wind projects in Norway in the future, following the proposal.

The tax proposal undermines the predictability of access to renewable energy at competitive prices for industrial offtakers

Risk of higher prices in existing long-term contracts as many wind farms may struggle with liquidity

- As many existing wind farms must alleviate default risk, they may try to renegotiate prices on contracts with offtakers. Thus, there is a possibility that those industrial offtakers having PPA's with onshore wind farms, may experience higher factor prices in production, possibly reducing competitiveness on the international market. Renegotiating PPA prices remains but a possibility, and offtakers are not necessarily inclined to undertake such negotiations.

The availability of alternative markets for PPA's with the same longevity and competitiveness as the existing PPA's with onshore wind farms, are limited (e.g. hydropower)

- Energy-intensive offtakers argue that the development and functioning of onshore wind and PPA's are mutually dependent on each other. Hydro power producers, for instance, do not necessarily find long-term fixed-price contracts attractive as their ability to store energy allows high profits when spot prices are high.
- On the other side of the ecosystem, project financing of wind farms is often contingent on long-term "locked-in" income to ensure that the risk level of the investment is within the requirements from debtors and equity mandate.
- Given that existing wind farms would indeed bear the risk of default, the above-mentioned dependency suggests that offtakers no longer have a market in which they can contract long-term access to renewable energy as a key ingredient in achieving competitiveness on the international market.

Risk of deteriorating attractiveness in future investments in energy-intensive industry activities, as competitive and long-term energy prices may no longer persist

- Risk of higher energy prices for offtakers, in turn having a deteriorating effect on the market for long-term PPA's as offtakers are reliant on competitive factor prices. Norway's position as an industrial- and energy-nation are based on stable and competitive access to renewable energy. As many energy-intensive industry players cannot lock in 10-15 year contracts on price levels they deem non-competitive, this notion will likely change for the worse.
- Many industrial players wish to undertake environmental-friendly upgrades to their plants. Such upgrades require access to competitive renewable energy, and as the tax proposal undermines both current and future energy volume from onshore wind (possibly offshore wind), they are reluctant to such undertakings.

Increased political risk

- Offtakers are concerned that the tax proposal signals significant increase in political risk, undermining future investment activity in renewable energy in Norway

Risk of access to reliable, competitive and long-term PPA's, combined with predictable access to renewable energy as a whole going into 2030 are concerns for offtakers following the tax proposal. If such access are not given, the competitiveness of Norwegian energy-intensive industry are at risk, possibly causing loss of jobs and an exodus of industrial value creation.

Deteriorating investment activity in Norwegian onshore wind has knock-on effects for industrial offtakers, in which reduced future volume of green energy and higher factor prices are a hinder to the well-functioning of the market for long-term and competitive PPA's that has proved pivotal in bringing forth competitive industry.

Source: Interview program conducted by KPMG



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The tax proposal is likely to, all else equal, cause an increase in electricity prices and reduced renewable energy supply in the short and medium term

Risk of higher electricity prices

- As the proposed tax results in an increase in levelized cost of energy for onshore wind farms, this must be compensated for by **higher prices** to those who offtake the electricity, if new development projects are to be financially viable.
- To add to the pressure on prices, future demand for renewable energy are expected to increase, **driving prices further up**.
- Norwegian energy-intensive industry is dependent on low, stable and competitive price on electricity. Historically, such competitive price levels have been sustained due to Norway's surplus in electricity production. In turn, as Norway's electricity production is largely based on climate (wind & water levels), production and price levels are volatile. With volatility and inability to store energy, some producers deem a certain amount of revenue locked in long-term fixed-price contracts attractive, which has supported the availability of long-term PPA's. As the proposed tax may have negative implications for the energy surplus, Norway arguably has to import **higher-price electricity** from connected markets, possibly causing severe upward pressure on energy prices and a deterioration in the availability of long-term and competitive PPA's.

Uncertain growth trajectory for the development of renewable energy

- Forecasts on supply and demand for renewable energy in Norway are predicting limited increase in energy volume from hydro power going into the second half of the 2020's towards 2030. Offshore wind is not expected to contribute notable volume until 2030/2040 onwards, that is, if investor interest in offshore wind is sustained, which is uncertain. Onshore wind, on the other hand, was expected to be a key contributor prior to the proposed tax regime.
- Expected return on onshore wind projects, in the proposed tax regime, is below required rate of returns for private investors. Consequently, supply of renewable energy will decrease in the short- and medium-term, driving **electricity prices up and creating a gap in supply**.
- What is more, private investors argue that only all-equity projects would be feasible in theory as debt financing is not compatible with the cash flows derived in the proposed tax regime. Few investors have the ability and desire to take all-equity positions given the low profitability, and future investments in Norwegian onshore wind from private investors are thus expected to be reduced significantly, or non-existing in the short- and medium term.

The result is a shortcoming in availability of renewable energy. Besides the **increased electricity price and supply gap** implication, this shortcoming has severe implications for the feasibility of the green transition. Both existing industry and the development of new green industry are heavily depended on reliable and competitive access to renewable energy, in which the proposed tax regime arguably hinders such access.

The politics derived from the tax proposal may have a reversing effect on green transition efforts as access to renewable energy going into 2030 is likely to be reduced.

Source: Interview program conducted by KPMG



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04 Cash flow effect on equity

KPMG has performed analysis of the tax proposal's effect on IRRs and cash flow to equity for different projects

Introduction

KPMG has performed analysis on the effect of the proposed tax on the internal rate of return (IRR) for different onshore wind projects.

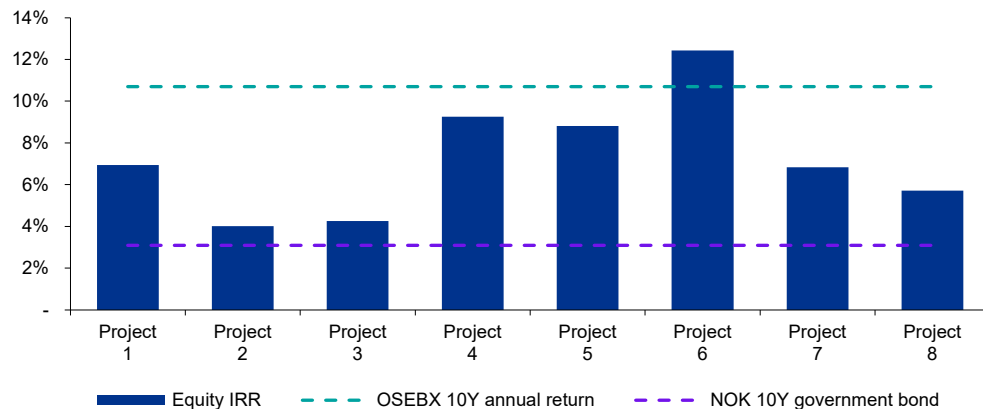
The analysis in this section covers 8 projects where we have received necessary information to perform analysis on the internal rate of return to equity ("Equity IRR") for the projects. We have also received information on 5 additional wind parks, however as these are financed through a company at a higher level in the group structure, a more simplified analysis have been carried out for these. These analyses are presented in Appendix.

The internal rate of return (IRR) is a measure of the return on an investment or project. It is the expected compound annual rate of return that will be earned on a project or investment.

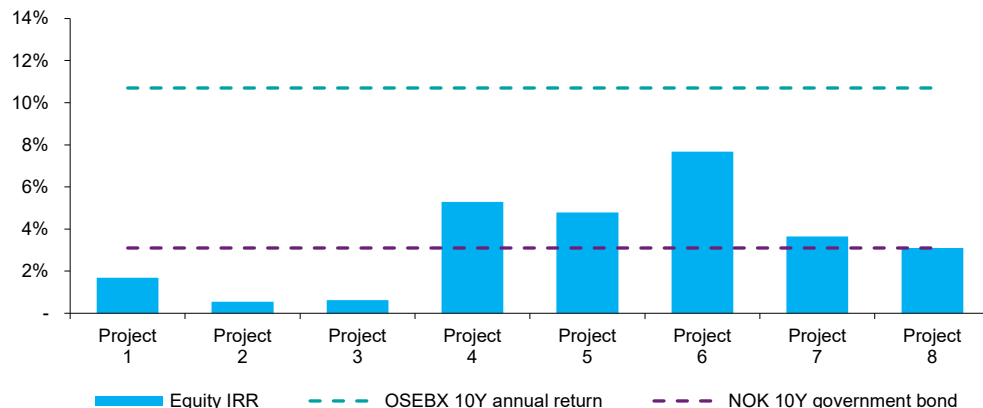
KPMG has also performed analysis on the effect of the proposed tax on the cash flow after debt service for the 8 onshore wind projects. Please note that shareholder loan is not treated as debt in the analysis and possible negative resource rent is not carried forward with interest.

No super profit and significant loss on invested equity for existing projects

Equity IRR before proposed tax



Equity IRR after proposed tax



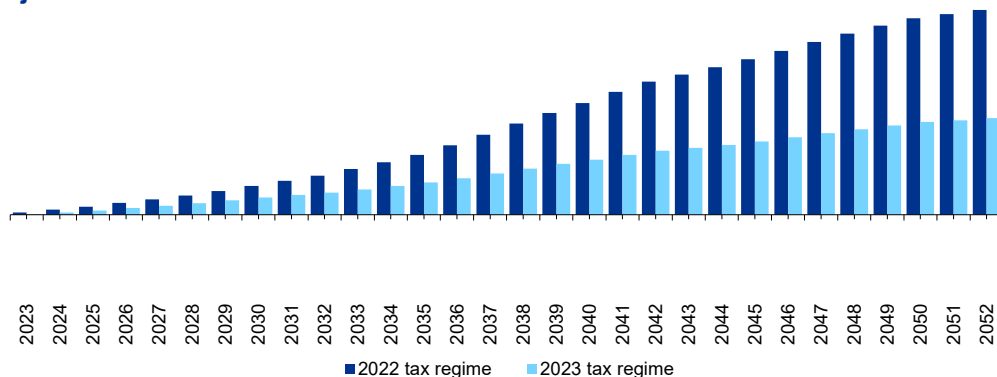
Source: Capital IQ, Bloomberg

Summary

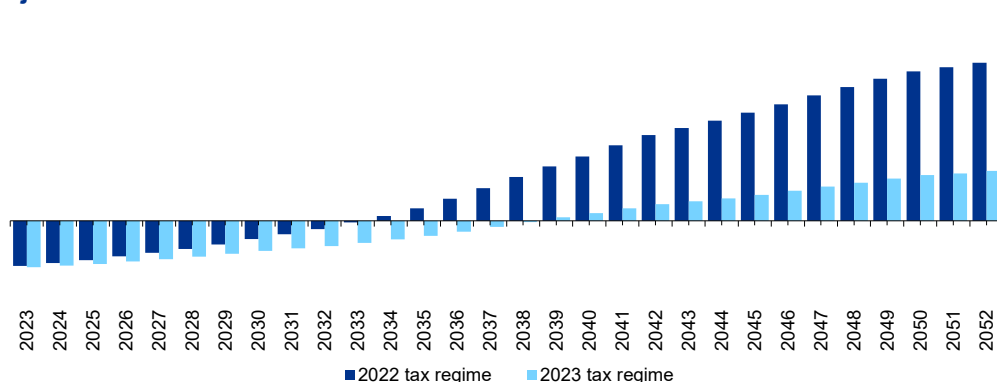
- Analysis performed on the wind farm’s equity IRR before the proposed tax indicates no super profit, with 7 out of the 8 projects with returns below Oslo Børs’ ten year annual return in the period 2012 to 2022. Analysis on the effect on the projects’ equity IRR after the proposed tax indicate a significant reduction in return on equity. The IRR of 3 out of 8 projects is calculated below the 10-year Norwegian government bond as of 2 December 2022, which results in significant loss on invested capital. After the tax proposal, all of the projects are calculated to have IRR’s significantly below the ten year annual return on the Oslo Stock Exchange for 2012-2022.
- The calculation of IRR after the proposed tax has not taken into account wind farms that are dependent on additional financing as a consequence of reduced cash flows to equity due to the new tax. Additional financing might result in increased interest costs and the need for increased debt servicing capacity. As such, financing will most likely be at worse terms than the current financing of the projects. Subsequently, this will lead to an even lower equity IRR for existing equity investors once taken into account. The reduced equity IRR increases the risk of investors getting no return on invested capital.
- The IRRs presented are calculated at the time of the initial investment and are based on the cash flow net of financing from the initial investments to the last operational year.

The tax proposal will lead to default for many existing projects

Sum accumulated cash flow available after debt service from 2023 for eight projects



Sum accumulated outflow and inflow to equity from start of operations for eight projects



Accumulated cash flow to equity

- Following the tax proposal, the sum of the 8 project's accumulated cash flows available after debt service from 2023 will almost be cut in half by 2052. The accumulated cash flow available after debt service for each of the projects are presented on the following pages.
- The lower adjacent graph illustrates the sum of the 8 project's accumulated outflow and inflow to equity throughout the projects lifetime. The cash flow in 2023 includes the accumulated cash flow from construction of the projects until 2023.
- Several of the analyzed projects will default on their under their loan facilities.
- Additional financing might result in increased interest costs and the need for increased debt servicing capacity. It is unclear on what terms the financial institutions would refinance under the new tax, however it is very likely that the refinancing will be at worse terms than the current financing of the project.
- Please note that the calculations have been made per annum so that the effect of reduced cash flow and debt service in a year has not taken into account increased debt and interest costs in the following year.
- Please see Appendix for more information related to the applied methodology.

05 Norway – Proposed legislation

Basis for resource rent tax on hydro power not present for onshore wind

Introduction to the proposal

- The government has proposed a cash flow tax based on the model for hydropower where investment costs are directly expensed effective from 1 January 2023. No deductions are granted for financial costs and negative calculated resource rent income may be carried forward with interest. For hydro power the tax value of negative resource rent income is paid out.
- The effective resource rent tax rate is 40% (formal tax rate at 51.3%)
- As part of the proposal is also a natural resource tax at NOK 0.13 per kWh to benefit the local municipalities in addition to the existing production fee which is proposed to be increased from NOK 0.1 to 0.2 per kWh.
- The government has also proposed to introduce a high-price contribution (windfall tax) on wind- and hydropower production with the rate set at 23 percent of the electricity price in excess of NOK 0.70 per kWh. The contribution is designed as an excise duty payable to the treasury.
- Public hearing deadline is not decided, but expectedly at the beginning of 2023.

A lack of super profit

- At the time of introduction of resource rent tax on hydro power, it was not disputed that there was a super profit and the tax regime was designed to only capture plants having super profits. More than half of the investments in wind power plants are backed by long term power purchase agreements to ensure limited but stable returns. Also, long term financial investors buying into existing projects are not benefitting from increased value in the planning and development phase. Unlike hydro power, onshore wind power is dependent on long term private investors, requiring a stable return on investment.

The proposed resource rent tax is not neutral

- The hydro power taxation model has been improved through the years to become fully tax neutral allowing effective deductions for all relevant cost. An important remedy was to allow reimbursement of negative resource rent tax replacing a carry forward mechanism. For onshore wind power production, a less neutral carry forward mechanism is proposed which is less neutral.



Norway demonstrates divergent approach to address high energy prices

Windfall tax to address high energy price levels in Europe

- To address the high power price levels, European countries have been looking at windfall profit taxes to fund relief measures for consumers. March 8, the European Commission recommended in its REPowerEU* communication that member states temporarily impose windfall taxes on all energy providers. The Commission suggested such measures be technologically neutral, not retroactive, and designed in a way that doesn't affect wholesale electricity prices and long-term price trends.
- EU-jurisdictions such as Czech Republic, Finland, Greece, Hungary, Italy, Romania, Spain have acted and are introducing windfall tax.
- To increase investments in renewable energy many jurisdictions have tax benefit schemes in place, such as accelerated depreciations**.
- The Norwegian government has also proposed a windfall tax on wind power production with the rate set at 23 % of the electricity price in excess of NOK 0.70 per kWh effective from 1 January 2023.

The Norwegian government introduces resource rent tax, while accelerated depreciation scheme expires

- According to the Norwegian government, high energy prices are also generating a super profit that should be subject to resource rent taxation at an effective tax rate of 40 % . The total combined tax rate on such revenue will be 85 % including 22 % corporate income tax and the windfall tax. The tax burden will significantly impact the industry.
- As of 1 January 2022, the five year linear depreciation scheme for wind power in place from 2015 also expired. This incentive has been instrumental in bringing about private investment in the increase in wind power production during that period.

* [resource.html \(europa.eu\)](https://ec.europa.eu/economy_finance/communication-repower-eu_en)

** [The power of nature \(assets.kpmg\)](#)



Comparison of resource rent tax on onshore wind power and hydropower



Hydropower



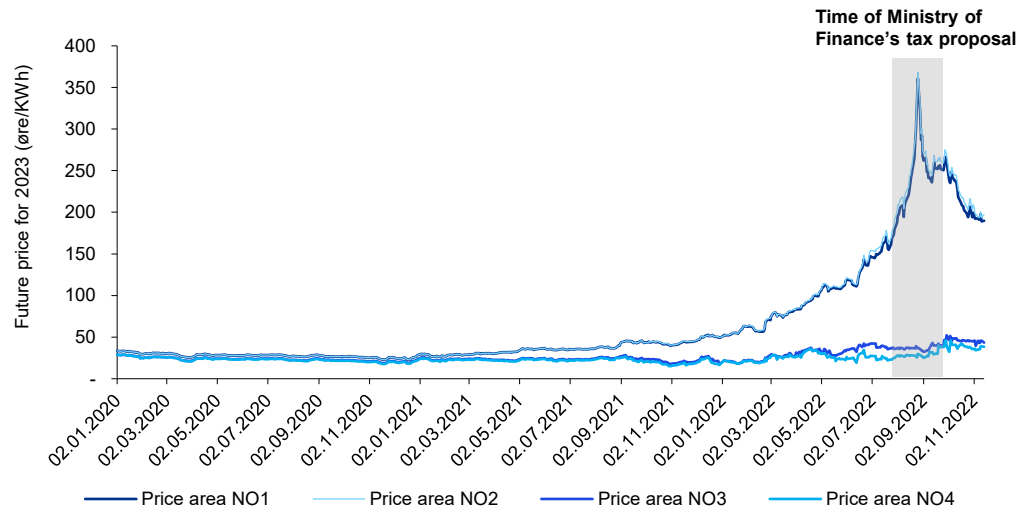
Onshore wind power

	Hydropower	Onshore wind power
General	<ul style="list-style-type: none"> Resource rent tax levied on net income for large hydropower plants (total nominal capacity of 10,000 kVA or more) Effective resource rent tax rate at 37% (proposed increased to 45% → total marginal tax of 67%). 	<ul style="list-style-type: none"> Proposed resource rent tax from 2023 on all wind farms subject to a concession under the Norwegian Energy Act (wind farms with more than 5 turbines, or a total installed effect of more than 1 MW) Resource rent tax rate proposed to 40% → marginal tax of 62%
Calculation of resource rent income	<ul style="list-style-type: none"> Main rule: Spot market price per kWh Exceptions – actual prices: power due to concession conditions, power produced in relation to long term power purchase price agreements, standardized fixed price agreements 	<ul style="list-style-type: none"> Main rule: Spot market price per kWh Exceptions – actual prices: existing fixed price power agreements entered into before 28 September 2022 and possibly standardized fixed price agreements
Deductible expenses	<ul style="list-style-type: none"> In principle: deductions for costs related to the resource rent tax liable business – production costs, investments, licence fee, property tax, annual taxable depreciations of assets and resource rent related corporate income tax No deductions for financial costs 	<ul style="list-style-type: none"> In principle: deductions for costs related to the resource rent tax liable business – production costs, investments, property tax, annual taxable depreciations of assets and resource rent related corporate income tax No deductions for financial costs
Negative resource rent income	<ul style="list-style-type: none"> Negative calculated resource rent income is disbursed Can also be set off against positive resource rent income from other power plants owned by the same taxpayer/within the same taxable group provided specific conditions are met 	<ul style="list-style-type: none"> Negative calculated resource rent income may be carried forward with interest and be deducted from positive calculated resource rent income in subsequent years

06 Estimated tax revenue for 2023

The Ministry of Finance ("FD") has estimated the tax proceeds in a period with extraordinary high power prices

Historical development in future power prices for 2023 in the period January 2020 to November 2022 ¹⁾



Introduction

- The Ministry of Finance has estimated that the new tax proposal will result in gross tax proceeds from the Norwegian onshore wind industry of NOK 2.5 billion. How the estimate is calculated has not been disclosed.
- KPMG have calculated the expected tax proceeds based on information from NVE, received financial models and insights from other relevant projects.

Assumptions

Power prices

- Revenues are calculated based on stated production in a normal year per wind farm average future price for 2023 from Montel in the different price areas on given dates.
- A capture rate of 90% has been applied. The capture rate reflects what proportion of the average power price in a given year the wind farm manages to achieve. Power plants with low flexibility, such as wind farms, will have a price factor below 100% as production normally takes place in periods where the power price is low. For 2022, we have been informed that some wind farms have had capture rates as low as 70%.

PPA prices

- Sale through PPA is assumed at a price of 30 øre/kWh for all projects, regardless of price area. The same capture rate of 90% has been applied for PPA as for spot sales.

Other items

- Operating costs, including land lease, is assumed to amount to 13.5 øre/kWh.
- Land lease is assumed to amount to 2% of total revenue.
- Excise duty on production and natural resource tax is assumed to amount to 3.3 øre/kWh.
- Tax depreciation for 2023 is assumed to be in the range from 2.4 øre/kWh to 56 øre/kWh.
- Note that no uplift related to investments, or similar, has been taken into account in the calculations as this has not been included in what has been presented by the government.

1) Due to lack of information on the price mark-up for NO2 in the period 1 January 2020 to 1 October 2021, the price mark-up for NO2 is assumed to be equal to the price mark-up for NO1 in this period.

The calculation of the tax proceed is based on public available information and our experience from previous projects

Example of calculation of resource rent tax

		NOK
A	Revenue	100
B	- Operating expenses	(35.6)
C	- Tax depreciation	(2.1)
D = A - B - C = EBIT		62.3
E = D x 22%	- Corporate tax (22% of EBIT)	(13.7)
F	+ Land lease	2.3
G = D - E + F = Resource rent taxable base		50.9
H = G x 51,3% = Gross Resource Rent Tax		26.1
I	- Excise duty on production and natural resource tax	(9.2)
J = H - I = Net Resource Rent Tax		16.9

Example of calculation of Excise duty on production and natural resource tax

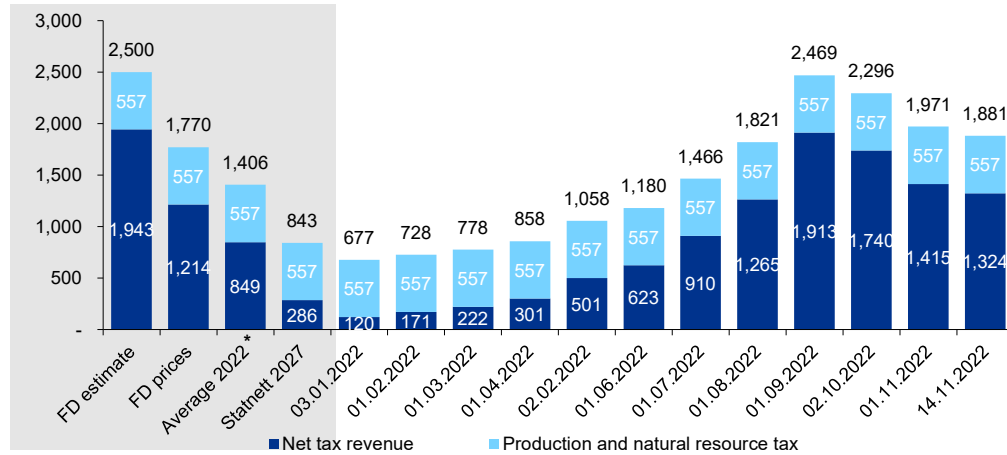
		NOK/Øre
A	Production (KWh)	279
B	x Fee per (Øre/KWh)	3.3
C = A x B = Excise duty on production and natural resource tax (Øre)		920
D	/ NOK/Øre	100
E = C / D = Excise duty on production and natural resource tax (NOK)		9.2

Resource rent tax

- The tables to the left presents a simplified example of how the resource rent tax is calculated.
- In case of a negative resource rent income, the deficit could be carried forward and be deducted from positive calculated resource rent income in subsequent years. The excise duty on production and natural resource tax needs to be paid every year before it could be deducted from payable resource rent tax.
- Corporate tax is calculated before resource rent tax, and is deducted from the basis for resource rent income. If the basis of the corporate tax (EBIT) is negative, the negative amount can be carried forward and be deducted in subsequent years. Corporate tax, and any carried forward deficit in general, will not be affected by the resource rent tax.
- Note that no uplift related to investments, or similar, has been taken into account in the calculations as this has not been proposed based on the information received so far.

The analysis indicates lower tax proceeds than what the Ministry of Finance expects in 2023

Tax proceeds in 2023 split between net tax proceeds and excise duty on production and natural resource tax (NOKm)



* Average 2023 future price in 2022

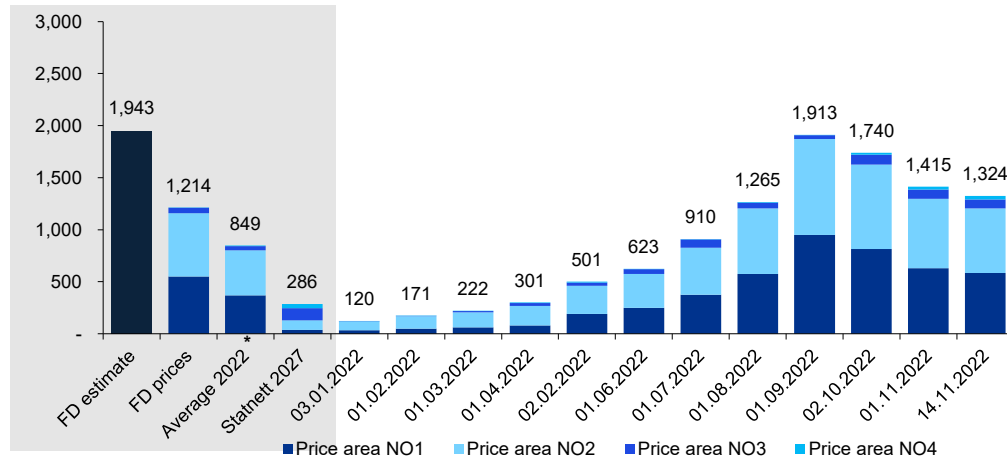
Tax proceeds

- Based on the proposed increase in excise duty on production and the introduction of the natural resource tax, excise duty on production and natural resource tax for 2023 is calculated to NOK 557 million. As such, the net tax proceeds (the resource rent tax) for 2023 implied by the estimate from the Ministry of Finance is NOK 1,943 million.
- If applying the same future prices for 2023 as the Ministry of Finance and a capture rate of 90%, the net tax proceeds for 2023 is estimated to NOK 1,214 million.
- If average future prices for 2023 in 2022 and a capture rate of 90% are applied, the net tax proceeds for 2023 is calculated to NOK 849 million.
- If applying Statnett's basis future prices for 2027 and a capture rate of 90%, the net tax proceeds for 2023 is calculated to NOK 286 million.
- The net tax proceeds for 2023 is sensitive for assumptions used in the analysis, particularly with regards to price and capture rate. In the adjacent table, the estimated net tax proceeds for 2023 is presented based on the future price for 2023 for different months in 2022 and a capture rate of 90% for sale through spot and PPA.

Assumptions applied		Future prices for 2023 not adjusted for capture rate (øre/KWh)														PPA		
Price area	Prod. (GWh)	FD-prices	Avr. 2022	Statnett 2027	3 Jan	1 Feb	1 Mar	1 Apr	2 May	1 Jun	1 Jul	1 Aug	1 Sep	3 Oct	1 Nov	14 Nov	% prod.	Price
NO1	1,285	183	144	52	51	62	70	83	107	119	146	188	267	238	200	190	-	30
NO2	4,868	194	149	54	51	63	72	85	108	122	154	201	275	246	209	198	78%	30
NO3	6,999	36	34	50	21	21	27	31	31	34	42	37	33	46	45	43	45%	30
NO4	3,713	26	28	40	21	21	25	27	29	26	27	28	26	32	36	39	61%	30
Total	16,865																55%	

Most of the net tax proceeds is expected to come from wind farms in the high-price areas

Net tax proceeds in 2023 split between price areas (NOKm)



* Average 2023 future price in 2022

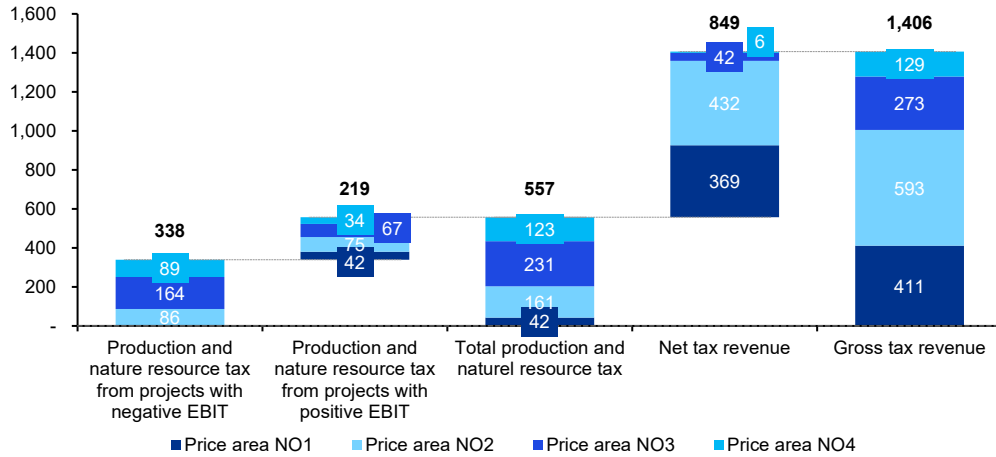
Assumptions applied		Future prices for 2023 not adjusted for capture rate (øre/KWh)																	PPA	
Price area	Prod. (GWh)	FD-prices	Avr. 2022	Statnett 2027	3	1	1	1	2	1	1	1	1	1	3	1	14	% prod.	Price	
NO1	1,285	183	144	52	51	62	70	83	107	119	146	188	267	238	200	190	-	30		
NO2	4,868	194	149	54	51	63	72	85	108	122	154	201	275	246	209	198	78%	30		
NO3	6,999	36	34	50	21	21	27	31	31	34	42	37	33	46	45	43	45%	30		
NO4	3,713	26	28	40	21	21	25	27	29	26	27	28	26	32	36	39	61%	30		
Total	16,865																	55%		

Net tax proceeds in different price areas

- The Nordic wind power market is divided in different price areas, where the prices are determined by the supply and demand for power in the specific market area. Market areas with a shortage of energy will normally have higher power prices than areas with more balanced energy. In Norway, the wind power market is divided in four price areas, NO1 (eastern Norway), NO2 (southern Norway), NO3 (central Norway) and NO4 (northern Norway), where the two former are defined as high-price areas and the two latter are defined as low-price areas.
- More than 60% of the wind farms in Norway are located in price areas NO3 and NO4, where the power prices are expected to remain low.
- Of the total net tax proceeds of NOK 849 million, calculated based on the average future price for 2023 in 2022 and a 90% capture rate, 94% is expected to come from the high-price areas and only 6% is expected from the low-price areas. However, due to the increased excise duty on production and the introduction of the natural resource tax, the low-price areas will end up with approximately 30% of the gross tax proceeds in 2023.

Excise duty on production and natural resource tax from wind farms with negative EBIT¹⁾ make up approx. one fourth of the tax proceeds in 2023

Gross tax proceeds in 2023 split between net tax proceeds and excise duty on production and natural resource tax (NOKm)



Comments

- As presented on the previous page, NOK 557 million of the tax proceeds in 2023 is assumed to come from excise duty on production and natural resource tax. Based on the average future prices for 2023 in 2022 and a capture rate of 90%, NOK 338 million of total excise duty on production and natural resource tax is expected from wind farms with negative operating profits. This corresponds to 24% of total gross tax proceeds.
- For the price areas NO3 and NO4 in particular, excise duty on production and natural resource tax from wind farms with negative operating profits are expected to constitute a significant portion of the gross tax proceeds for 2023.

Notes: 1) EBIT based on taxable depreciation

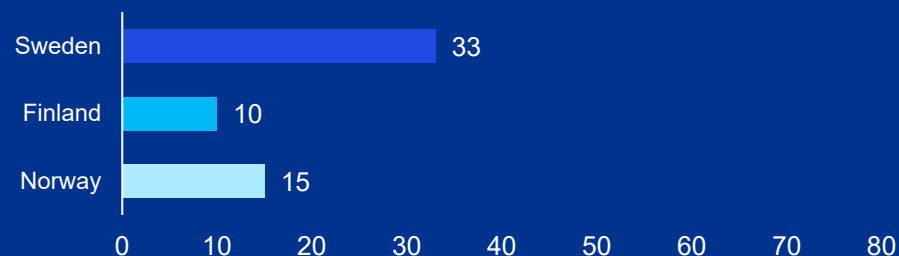
07 Nordics – Comparison of tax regimes

Ambitious goals for renewable energy production in Finland and Sweden

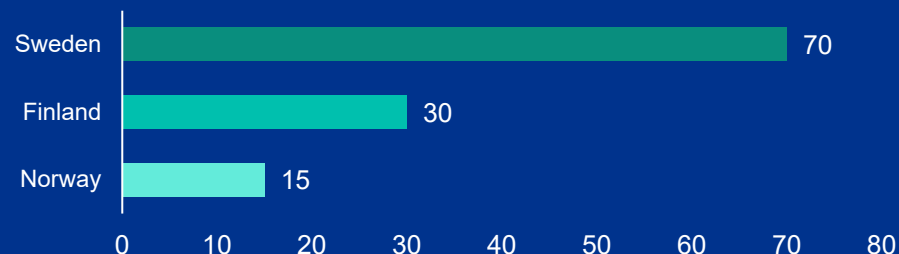


Investments in wind power production in Norway are currently at a halt, while the other Nordics are investing heavily towards 2030 and beyond.

Estimated wind power production 2022 - TWh



Estimated wind power production 2030 - TWh



[*https://www.reuters.com/business/environment/onshore-wind-become-swedens-largest-power-source-by-2030-rystad-2022-11-17/](https://www.reuters.com/business/environment/onshore-wind-become-swedens-largest-power-source-by-2030-rystad-2022-11-17/)

[**https://tuulivoimayhdistys.fi/en/wind-power-in-finland-2/wind-power-in-finland/about-wind-power-in-finland](https://tuulivoimayhdistys.fi/en/wind-power-in-finland-2/wind-power-in-finland/about-wind-power-in-finland)

[***https://publikasjoner.nve.no/rapport/2021/rapport2021_29.pdf](https://publikasjoner.nve.no/rapport/2021/rapport2021_29.pdf)



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Investment in Norway, Finland and Sweden (the Nordics)

Finland and Sweden have ambitions to significantly increase renewable power production, and onshore wind is considered to play a significant part of the energy transition in these countries.

In Sweden, the estimated wind power production in 2030 is 70 TWh, according to Rystad Energy*. In Finland, the estimated wind power production is expected to be 30 TWh in 2030 according to the Finnish Wind Power Association.**

In Norway, The Norwegian Water Resources and Energy Directorate (NVE) do not expect an increase in power production from onshore wind towards 2030, while additional power production towards 2040 is estimated to be 3 TWh. The ambition is that offshore wind will contribute to the energy mix in Norway from 2030.***

The first wind farms to be built in Norway is rapidly coming to the end of their expected lifetime, and will have to be repowered to remain operative.

More favorable tax environment in Finland and Sweden

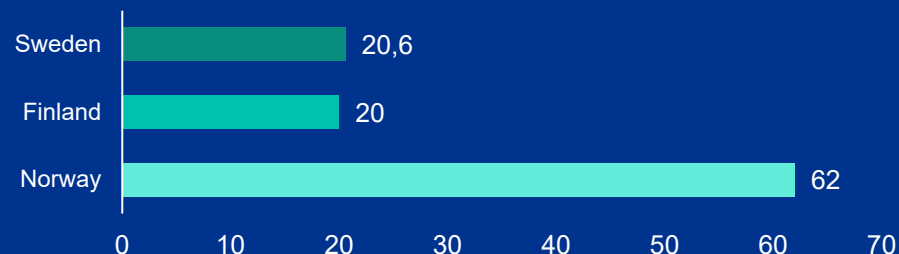


Tax rates in the Nordics are at the same level for 2022. For 2023, Norway will be the only country with an increase in tax rates.

Tax rates - 2022



Tax rates – 2023



Investors in onshore wind – tax environment

Foreign investors hold a significant interest in onshore wind in the Nordics. Wind project developers are competing to get investors to take over the projects or to enter into joint ventures.

Investors will normally focus on the most profitable projects. Taxation of production and profits are key elements when assessing a project's profitability.

Up to now, the corporate income tax in the Nordics has been on the same level, with headline rates varying from 20 % to 22 %. Tax rates are excluded potential windfall taxes.

Swedish wind power producers have had more favorable depreciation rules for tax purposes than Norwegian wind power producers. Hence, Sweden was able to attract more investments in onshore wind compared to Norway. In 2015, a temporary depreciation rule was implemented in Norway, to attract investments in the sector. Investments in Sweden decreased the following years while investments in Norway had a significant boost. Swedish investments regained speed a few years later, when the temporary depreciation rules in Norway expired.

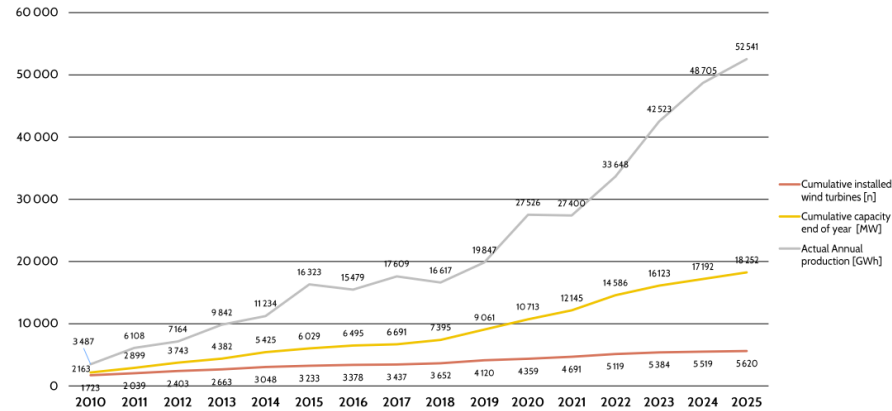
With the introduction of Resource Rent Tax, combined with introduction of Natural Resource Tax and increased Production Tax, the effective tax cost in Norway will increase significantly. The effective tax cost in Norway will be markedly higher than in Finland and Sweden. In addition, the unconventional introduction of the new tax regime in Norway has created an element of political uncertainty.

Our report indicates that future investments in Norwegian onshore wind power may be severely negatively impacted and may be shifted to other jurisdictions.

08 Appendixes

Appendix 1 – Finland and Sweden

Short term forecast, 2022-09-30

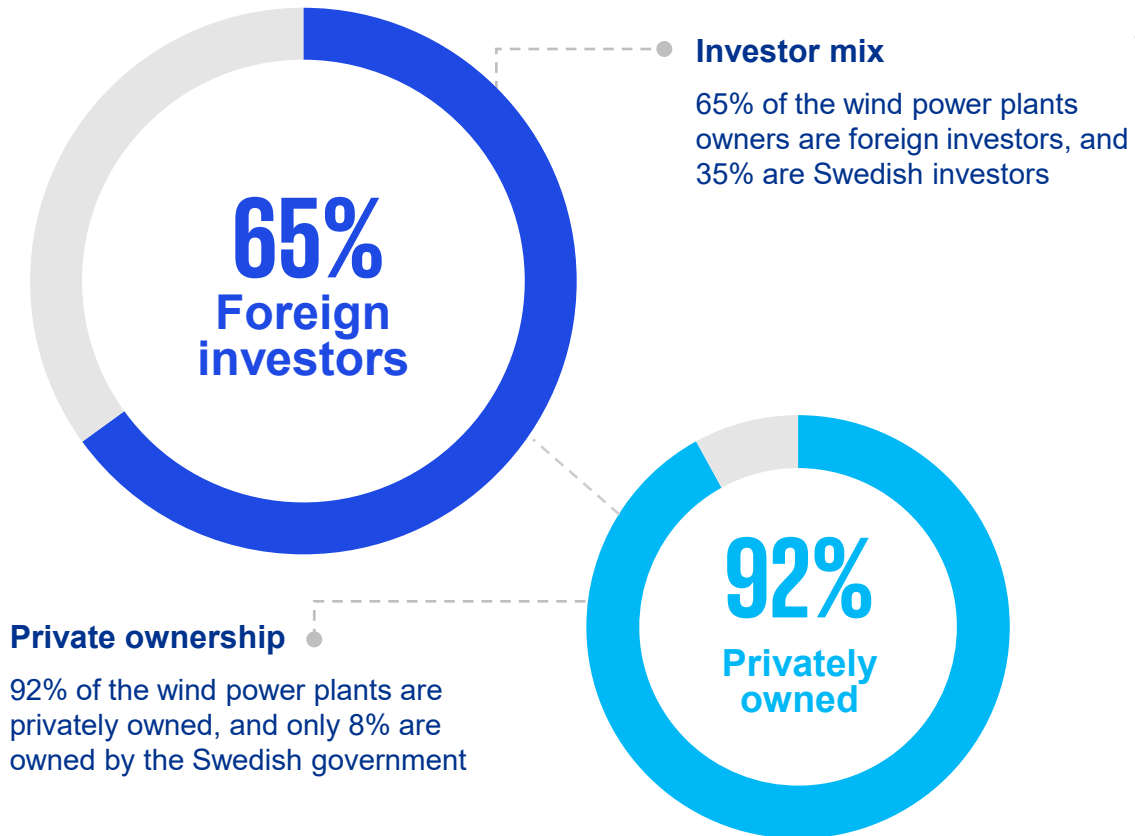


svensk
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Production development and strategy

- The annual production of wind power in Sweden in 2022 is estimated at approximately 33.6 TWh.
- Towards 2045, the Swedish Government expects a double electricity demand. The new energy goals aims at a 100 % fossil free electricity system by 2045. Fossil free do not mean renewable, as it also covers nuclear.
- Rystad Energy estimates onshore wind in Sweden will generate 70,1 TWh by 2030
- Currently, the production costs related to onshore wind power production are estimated at 24-36 öre/kWh, which is the lowest estimated production cost compared to other power production such as solar (29-107 öre/kWh), offshore wind (51-55 öre/kWh) and biopower (47-59 öre/kWh).

Ownership of wind power plants



Owners of the power plants

- In Sweden, 65% of the wind power plants owners are foreign investors.
- 92% of the power plants are privately owned, and only 8% are owned by the Swedish government.

Sweden – Taxation of wind power

Corporate income tax

Swedish tax resident corporate entities are subject to corporate income tax at the rate of 21.4% on its worldwide income (for fiscal years commencing 2021 and onwards the corporate tax rate is 20.6%). There are no local or municipal taxes on business income and companies are not subject to net wealth tax. There is no transfer tax, stamp duty or similar tax on the transfer of shares. Social security contributions are normally also levied for employers.

When doing investments on a property the costs should normally be activated for tax purposes either as machinery and equipment, land, land improvements or buildings. It may also be possible to directly deduct certain costs for tax purposes. Wind turbines are normally classified as machinery and equipment under Swedish tax depreciation rules but certain costs may also be related to land improvements and buildings.

Property Tax

Wind farms are subject to real estate tax and are thus also assessed from a tax assessment value perspective. The tax base for real estate tax is an assessed tax value that should reflect approximately 75% of the fair market value of the assets in question. The assessment is made by the Swedish Tax Agency every sixth year for industrial properties and power generation units such as wind mills. The Swedish Tax Agency basically uses actual prices on historical transactions in a geographical area to calculate the average price two years before the calculation is made and use 75% of this average price as tax base.

For wind mills the tax assessment value is calculated using a standardized method that considers the value of the wind mill, installed gross effect, age, profitability etc. The method is used to ensure that the tax base for the wind mill is as close to 75% of its fair market value as possible.

The statutory tax rate is 0.2% of the turbine's assessed property tax value. The rate applicable to other types of power plants is 0.5%.

The Administrative Supreme Court has in a ruling from April 2019 concluded that applying a lower tax rate to wind turbines constitutes unlawful state aid. In brief, the court held that the property tax should be levied based on the 0.5% rate, if using a 0.2% rate means that the EU de minimis aid threshold is exceeded. According to the EU rules, state aid must not exceed EUR 200,000 for a three-year period. The threshold should be used on a group level, if applicable.

Property tax is defined as a special tax and should be deductible as an operating cost in the business.

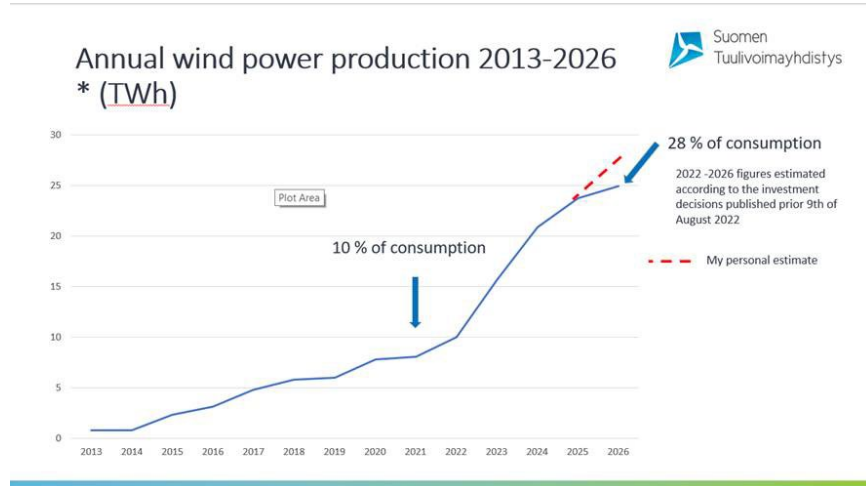
Energy tax

Electricity produced in Sweden is subject to energy tax. However, a producer is only obligated to charge tax on electricity when they deliver electricity to consumers who are not registered for energy tax on electricity. E.g. if a supplier purchases electricity from a producer and delivers it to a consumer, the supplier is liable for the tax and not the producer. The standard tax rate is 0.353 SEK/kWh.

In certain areas in the northern Sweden the rate may be reduced by 0,096 SEK/kWh. However, in order to obtain the tax exemption, the electricity must not be consumed for the following purpose:

- Industrial activity
- Computer hall
- Professional farming or forestry activities
- Professional aquaculture activities
- Trains or other means of rail transport
- Cold ironing "Landström"

Finland

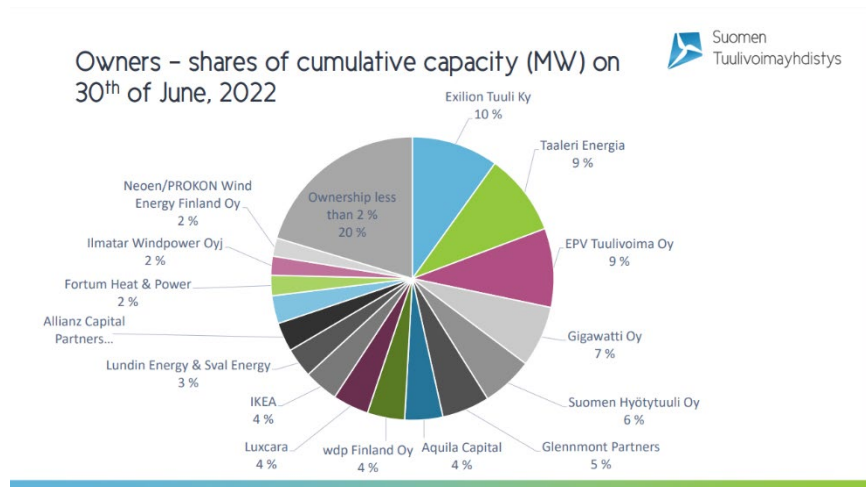


Production development and strategy

- Based on the graph illustrating annual production, the wind power production in Finland in 2022 is estimated to be approximately 10 TWh.
- Finland has the potential to increase wind power capacity considerably. In 2026, the production is estimated to be 25 TWh.
- The wind power industry in Finland aims to achieve at least 30 TWh of annual wind power production from 2030, which corresponds to approximately 30% of Finland's electricity consumption at that time.

Owners of the power plants

- Investors are a mix of foreign and domestic investors. Investments is partly held directly, or through Mankala companies.
- In 2018, about 40 % of the produced electricity was based on the Mankala principle.
- Companies applying the Mankala principle are limited liability companies. Mankala companies aim to produce electricity for the shareholders at production cost instead of making profit and paying dividends. The shareholders sell their share of the electricity, or use it in their own processes. The economic result of generating electricity is part of the shareholder's own profit/loss.
- In addition to companies applying the Mankala principle, price securing mechanism's such as PPA's is common in Finland.



Source: Finnish Wind Power Association: [Suomen Tuulivoimayhdistys \(STY\)](https://www.sty.fi/)

Finland – Taxation of wind power

Corporate income tax

The corporate income tax rate is 20%. Therefore, a Finnish tax resident corporation involved in wind production is taxed as any other corporation: the corporate income tax is 20% of the taxable income. For tax depreciation purposes, the wind power plant is divided into components on basis of the different tax depreciation categories: the tower itself (the frame body and the engine room) is treated as a construction whose maximum annual depreciation is 20% and the rotor, gear box and generator are treated as movable fixed assets whose maximum annual depreciation is 25%.

Special tax regime

Real estate tax

The real estate tax is payable on all kind of land and land related rights, buildings, constructions and other fixtures on land (=real estate). Wind power plants are regarded as constructions for real estate tax purposes, but the chattels/non-fixed parts of the wind power plant, e.g. the engine, gear, generator etc, are not subject to real estate tax. The tax base for real estate tax is calculated on basis of the value of the real estate (wind power plant + land). The values are schematic and derived mainly from databases upheld by different authorities:

- *The value of constructions.* In 2022, the initial value of wind power plant for real estate tax purposes is 75% of its building cost (excluding the abovementioned chattel/non-fixed parts). The initial value is deducted by the annual age discount, which is 2.5% (however, the value cannot drop below 40% of the abovementioned 75%) and the result will form the actual tax base. Where the construction is not ready, the value is calculated on basis of the degree of completion. The real estate tax rate for constructions depends on the municipality where the real estate is situated, but usually it is approx. 0-3.1%.

- *The value of the land.* The authorities maintain databases on land values per square meter all over Finland. This schematic value is multiplied for real estate tax purposes either by the actual land's area square meter size or planning permission's square meter size, which will form the initial tax base. If the wind power plant is on agriculture or forestry area, the presumption is that the size of the land reserved for the wind power plant is 2000 square meters because forestry and agricultural land are not subject to real estate tax. The actual tax base is the product of the abovementioned initial tax base multiplied by 75% (the formula follows the logic of the value of constructions). The real estate tax rate for land depends on the municipality where the real estate is situated and it varies between 0.93-2%.

Appendix 2 – Comparison of tax regime for wind and hydro power

Comparison of resource rent tax on onshore wind power and hydropower

Current resource rent taxation system on hydropower production

Overview

- The resource rent tax is from 2021 modelled as a cash flow tax calculated based on actual production multiplied with the total amount of spot market prices per hour. Production costs, investments, licence fee, property tax, annual taxable depreciations of assets and resource rent related corporate income tax are deductible from the tax base in the year they occur.
- The effective resource rent tax rate is 37% (proposed increased to 45%, which will lead to a total marginal tax of 67%).
- Potential negative tax value of resource rent income is disbursed.
- Negative resource rent income can be set off against positive resource rent income from other power plants owned by the same taxpayer provided specific conditions are met. In addition, negative resource rent income is under certain conditions deductible from positive resource rent income in another power plant owned within the same taxable group.
- An exemption from the spot market price is applicable for hydropower produced in relation to long term purchase price agreements entered into before 1 January 1996 for a period of more than 7 years – for this production, the hydropower is valued based on the contract price.
- Furthermore, power produced in relation to conditions for the concession is valued based on obtained prices.
- Hydropower plants with generators that in the income year have a total nominal capacity of less than 10,000 kWa are exempt from resource rent taxation.

Proposed resource rent taxation system on onshore wind power production

Overview

- The resource rent tax is designed as a cash-flow tax based on the model of the current taxation of hydropower, i.e. based on spot market prices less deductions for relevant production costs, investments, property tax and resource rent related corporate income tax. Income from electricity certificates and guarantees of origin should also be included in the tax base.
- Investments can be deducted directly in the investment year. Operating assets that have been acquired before the introduction of the resource rent tax can be deducted through ordinary depreciations.
- The effective resource rent tax rate is proposed to 40%, which will lead to a total marginal tax of 62%
- Negative calculated resource rent income is not disbursed, but can be carried forward with interest and be deducted from positive calculated resource rent income in subsequent years.
- The contract exemption from spot market prices for long term purchase price agreements for hydropower is not suggested for onshore hydro power.
- However, an exemption for existing fixed price power agreements entered into before 28 September 2022 is proposed, where the use of the actual sales price in will be accepted.
- Only wind farms with 5 turbines or less, or a total installed effect of 1 MW or less, is exempt from resource rent taxation.

Comparison of resource rent tax on onshore wind power and hydropower

Current resource rent taxation system on hydropower production (*cont.*)

Fixed price agreements

- It has been proposed to introduce an exemption from the spot market price valuation for fixed price contracts in relation to resource rent tax on hydropower. Based on the proposal, the resource rent tax may under certain requirements be based on the actual income of the hydropower producer through a fixed price agreement rather than the spot market price. The proposal is made to incentivize suppliers of electricity to enter into fixed price agreements, and include contracts for periods of 3, 5 or 7 years with a set markup.

Natural resource tax

- The natural resource tax on hydropower distributed to the municipalities and counties is set at respectively NOK 0.11 per kWh and NOK 0.02 per kWh.
- The natural resource tax is not deductible in the resource rent income, but is deductible, krone by krone, against the assessed tax on general income.

Proposed resource rent taxation system on onshore wind power production (*cont.*)

Fixed price agreements

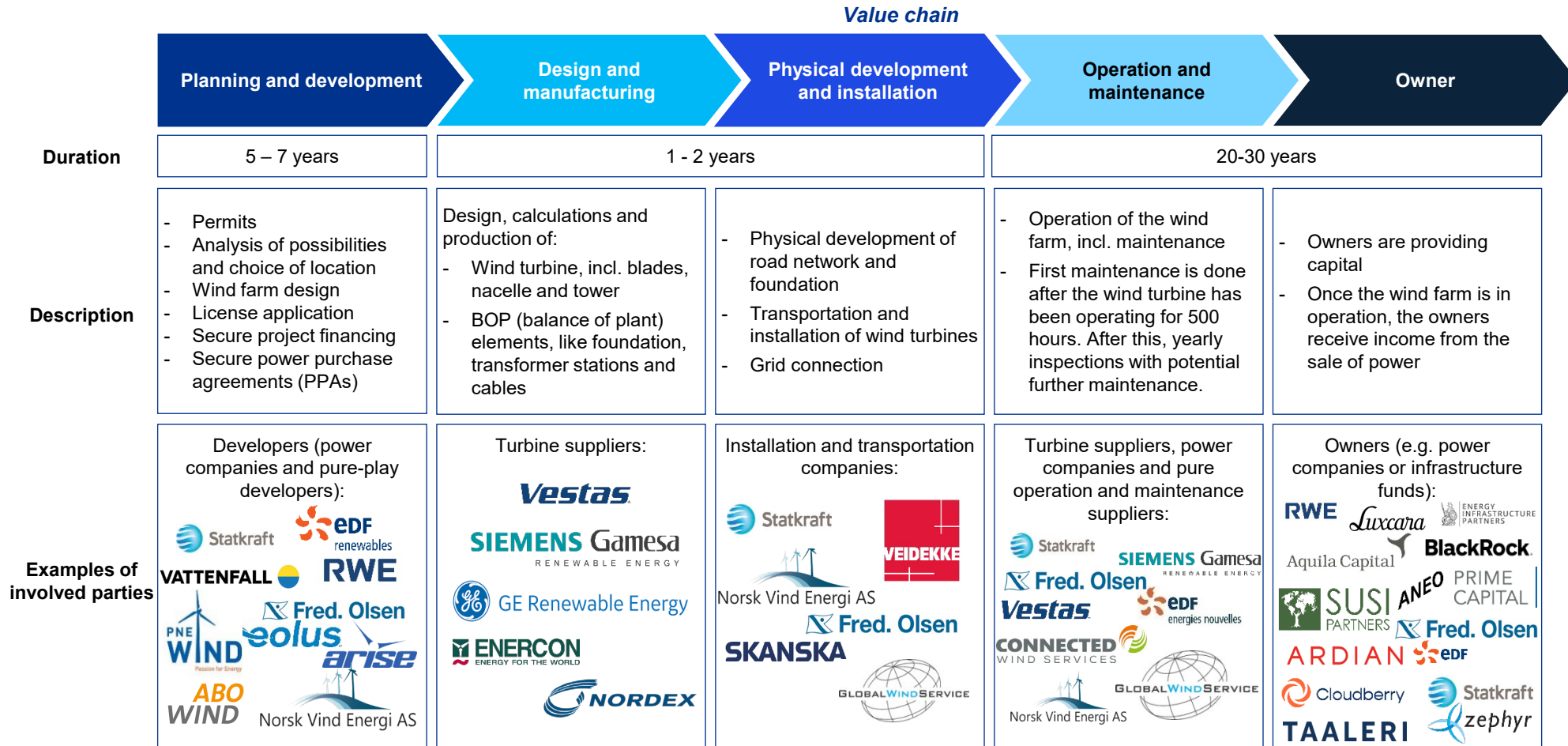
- An exemption from spot market prices for fixed price agreements as proposed for hydropower will also be assessed in relation to wind power.

Production fee and natural resource tax

- The recently introduced production fee, for the benefit of host municipalities, is proposed increased from NOK 0.01 to NOK 0.02 per kWh and may be credited against calculated resource rent tax.
- Additionally, a natural resource tax which will be distributed to the local municipalities has been proposed set at NOK 0.013 per kWh. The natural resource tax may also be credited against calculated resource rent tax.
- For producers subject to resource rent taxation, the production fee / natural resource tax should in principle mean no additional burden, though it could have a liquidity effect if the fee/tax exceeds resource rent tax payable.

Appendix 3 – Value chain and value development

Development of wind power is a demanding process where developers and owners have different roles in the value chain



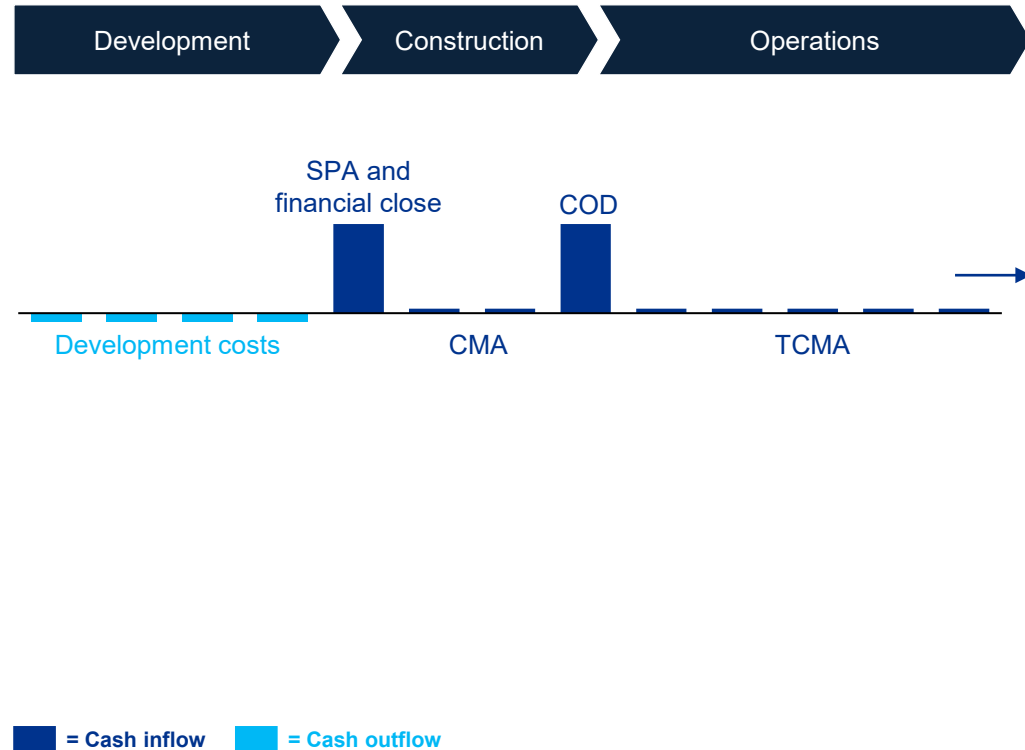
Developers are mainly involved early in the life cycle of a project, while long-term owners purchase the project when it is ready to build

Illustration of difference phases of wind power development

Developer's role	Owner and developer			Project management	Operation and maintenance
Long-term owner's role				Owner and capital provider	
	Exploration	Analysis and planning	Collect permits, agreements and financing	Physical development	Operation
Duration	6-12 months	18-24 months	18-48 months	12-24 months	20-30 years
Description	<ul style="list-style-type: none"> - Identify areas suited for wind power - Enter into agreements with landowners - Initial approvals from local government - Establish project companies 	<ul style="list-style-type: none"> - Conduct thorough analyses of environmental impact, wind potential and logistics regarding physical development and grid connection - Design the wind-power station - License application 	<ul style="list-style-type: none"> - Final approval from public departments and local society - Secure grid connection - Secure project financing - Initial negotiation with turbine suppliers and contractors - Secure Power Purchase Agreements («PPA») for the wind power station 	<ul style="list-style-type: none"> - Purchasing wind turbines, physical development of road network and foundation - Installation of wind turbines - Grid connection 	<ul style="list-style-type: none"> - The wind-power station is in operation and attached to grid - Operations - Maintenance
Other parties	<ul style="list-style-type: none"> - Land owners - Local government - External advisors within wind power 	<ul style="list-style-type: none"> - External advisors within anemometry and physical development - Public departments like Norges Vassdrags- og Energidirektorat («NVE») - Grid companies like Statnett and Lyse Elnett 	<ul style="list-style-type: none"> - Public departments like NVE and Olje- og Energidepartementet («OED») - Local government - Network companies - Legal, financial and technical advisors - Turbine suppliers - Investors 	<ul style="list-style-type: none"> - Contractors like Veidekke and Skanska - Grid companies - Turbine suppliers - Other suppliers 	<ul style="list-style-type: none"> - Investors - Turbine suppliers - Contractors

Developers' core operations are development and sale of wind projects, but they also generate revenue through other parts of the value chain

Simplified illustration of cash inflow and outflow for project developers

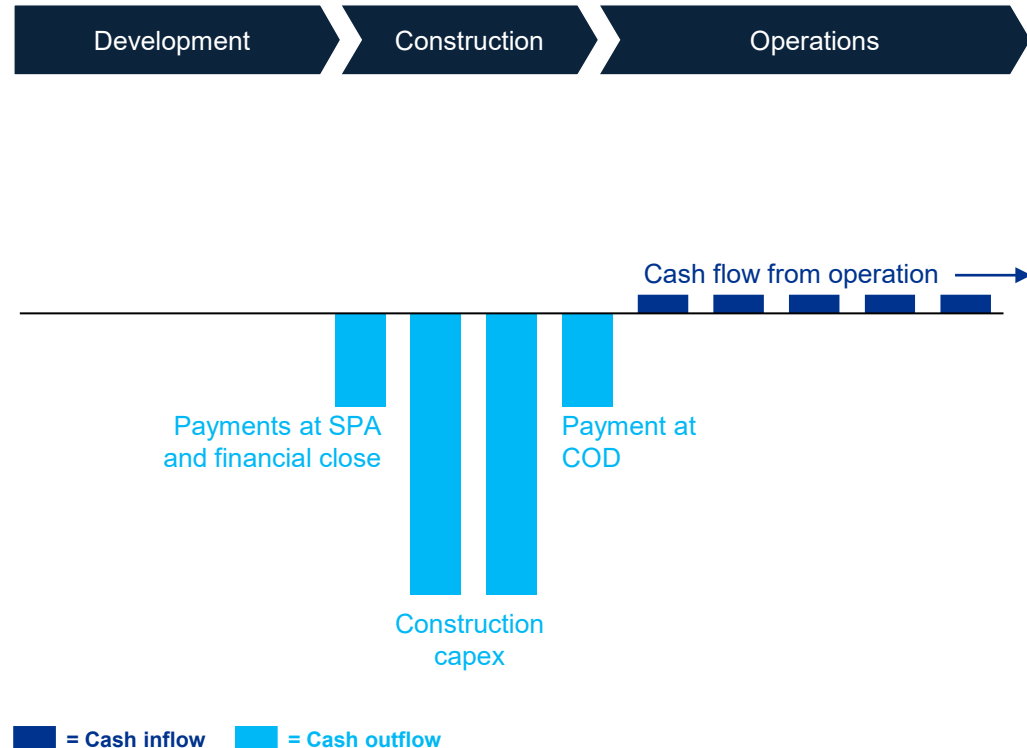


Costs and payments for a self-developed project

- Project developers bundle input factors, which individually have limited value, to wind power projects that are ready for construction. When the wind farm is ready for construction, the project developer sells the wind farm to external investors.
- Project developers' income streams are divided into the following categories:
 - **Sale of ready-to-build projects:** Project developers sell projects that are ready for construction. The share purchase agreements («SPA») are usually structured so that the total compensation are to be paid out periodically based on attainment of predetermined milestones, like signing of SPA, financial close, and commercial operation date («COD»).
 - **Construction Management Agreements («CMA»):** Project developers enter into CMAs with the project as part of the sales agreement, and is responsible for coordinating the involved parties under the construction phase.
 - **Technical and Commercial Management Agreements («TCMA»):** When the wind-power station is in operation, project developers might assist with financial reporting and follow-up of maintenance contracts.
- The costs in the development phase of a wind power project are low compared to later phases, and are mainly linked to salaries and advisers. Project developers often rely on external advisers, and therefore have the opportunity to adapt the cost level to varying activities.

Long-term owners make significant investments from signing of SPA to COD and receive stable but moderate cash flows in the operation phase

Simplified illustration of cash inflow and outflow for long-term owners

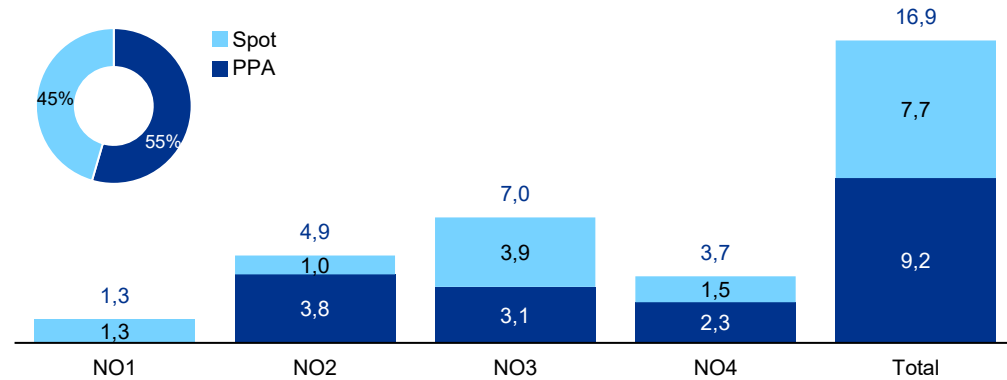


Costs and payments for long-term owner

- Project developers' cash flows are divided into the following categories:
 - **Purchase of ready-to-build projects:** Long-term owners purchase projects that are ready for construction. The share purchase agreements («SPA») are usually structured so that the total compensation are to be paid out periodically based on attainment of predetermined milestones, like signing of SPA, financial close, and commercial operation date («COD»).
 - **Construction capex:** Long-term owners secure the project financing in order to construct the wind farm. Significant capex investments are made during the construction phase
 - **Cash flow from operation:** In the operation phase, the long-term owner receive cash flows from the operational wind farm. Cash flows are considered stable but moderate. Both costs and revenues are mainly fixed. Having a PPA in place to secure the revenue stream for the project is often necessary to attract banks and other project financiers.
 - This a very attractive package for institutional investors who get an assets with a low risk profile and stable cash flow for many years, and which can also be marketed as Environmental, Social and Governance ("ESG") friendly.

Offtakers of PPAs capture the main part of the profit from increasing prices, not the wind power project as they are obliged to sell below market price

Power production (TWh) from Norwegian wind farms in 2023 split between spot and PPA



Power Purchase Agreements (“PPA”)

- When committing to long-term investments in renewable energy, predictability is crucial. Renewable energy from wind are highly dependent on constantly changing weather conditions and fluctuating electricity prices. As such, it can be difficult to predict cash flows. Therefore, having a PPA in place to secure the revenue stream for the project is often necessary to achieve debt and equity financing.
- PPAs are long-term supply contracts between power producers (sellers) and energy consumers (“offtakers”). The contract often defines the agreed delivery period and price, as well as the quantity at a fixed volume. PPAs are usually signed for a long-term period between 10-20 years and either structured as ‘pay as produced’ or as ‘baseload’. The former typically implies that a fixed price is paid for any volume produced. The latter is a contract with predefined volumes according to a predefined hourly profile.
- Based on an overall analysis of Norwegian projects, approximately 55% of all production in 2023 is expected to be sold through PPAs.
- If the new tax on wind power is introduced, this entails a significant financial risk for the producers, as the fixed contracts mean that the sellers are obligated to deliver power to the buyers, although it is no longer profitable. In addition, it can be assumed that future PPAs will become more expensive in order to achieve acceptable returns for new projects.
- Offtakers of PPAs capture the main part of the profit from increasing prices, not the wind power project as they are obliged to sell power at PPA prices which are significantly below market price.

Appendix 4 – Methodology applied in the cash flow to equity analysis and project analysis

Methodology applied in the cash flow to equity analysis

Example of cash flow calculation before research rent tax

		NOK	Comment
A	Revenues	100	Input
B	- Operational expenses	(38,3)	Input
C = A - B	= EBITDA	61,7	Calculated
D	+/- Change in net working capital	(0,2)	Input
E = C +/- D	= Cash flow from operations	61,5	Calculated
F	- Corporate tax	(4,6)	Input
G = E - F	= Cash flow before financing	56,9	Calculated
H	+ Finance	0	Input
I = G + H	= Cash flow before debt servicing	56,9	Calculated
J	- Debt servicing	(55,7)	Input
K = I - J	= Cash flow after debt servicing	1,2	Calculated

Cash flow after debt service under the current tax regime

- We have calculated the cash flow after debt service and accumulated the cash flows from 2023 and onwards to illustrate the ability to meet scheduled debt repayments. When calculating the free cash flow under the current tax regime, the following inputs have been applied:
 - Revenues
 - Operational expenses
 - Change in net working capital
 - Corporate tax
 - Financing
 - Debt servicing
- Note that the introduction of high-price contribution has not been taken into account in the calculation.
- When calculating the free cash flows and IRRs, we have applied the companies' models as our starting point. We have not checked whether the models are calculated correctly or assessed the assumptions in the model. Among other, the companies' operates with different price curves and currency rates. We have not made any changes to the companies' input. We have exclusively looked at the effect by taking into account the introduction of resource rent tax in the models received. If adjustments had been made to assumptions or recalculations of the models, the conclusion could have been different from those presented in the report.

Methodology applied in the cash flow to equity analysis

Example of cash flow calculation including research rent tax

		NOK	Comment
A	Revenues	100	Input
B	- Operational expenses	(35,6)	Input ¹⁾
C = A - B	= EBITDA	64,4	Calculated
D	+/- Change in net working capital	(0,2)	Input ¹⁾
E = C +/- D	= Cash flow from operations	64,2	Calculated
F	- Corporate tax	(4,6)	Input ¹⁾
G	- Excise duty on production and natural resource tax	(9,2)	Calculated
H	- Resource rent tax	(16,9)	Calculated
I = E - F - G - H	= Cash flow before financing	33,5	Calculated
J	+ Financing	0	Input
K = I + J	= Cash flow before debt servicing	33,5	Calculated
L	- Debt servicing	(55,7)	Input
M = K - L	= Cash flow after debt servicing	(22,2)	Calculated

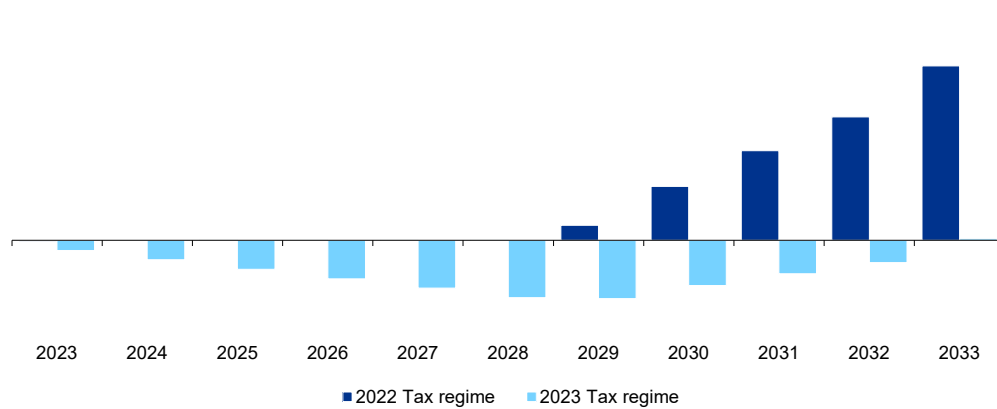
¹⁾ In this calculation, the excise duty on production has been removed before extracting the input, as such, there will be some changes in the figures we obtain from the companies' models. This applies to operational expenses, change in net working capital and corporate tax. We have not checked whether the company's models are correctly calculated. In the cases where we have not received dynamical models, we have applied a simplified approach and removed the excise duty on production from opex based on production figures and adjusted tax on ordinary income with 22% for this adjustment. Change in net working capital has been kept unchanged. Note that some of the wind farms have tax loss carry forward, which result in somewhat low corporate tax.

Cash flow after debt service under the proposed tax regime

- When calculating the cash flow after debt service with the proposed tax regime, the following inputs have been applied:
 - Revenues
 - Operational expenses excluding excise duty on production
 - Updated change in net working capital (change in operational costs somewhat changes the working capital)
 - Updated corporate tax (will increase somewhat due to the excise duty on production not being included in the tax basis)
 - Financing
 - Debt servicing
 - Land leases
 - Production
 - Any forward curve for EUR/NOK
- Note that the introduction of high price contribution has not been taken into account in the calculation.
- Note that no uplift related to investments, or similar, has been taken into account in the calculations as this has not been proposed based on the information received so far.

Project 1 is calculated to have insufficient cash flow to meet the scheduled debt repayments in the period 2023 to 2032

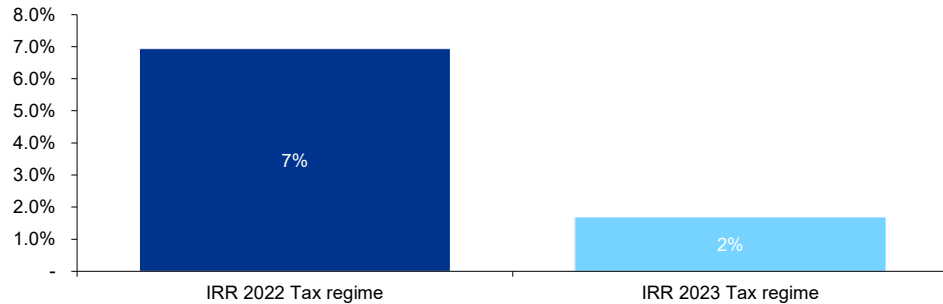
Accumulated cash flow after debt service from 2023



Description of project 1

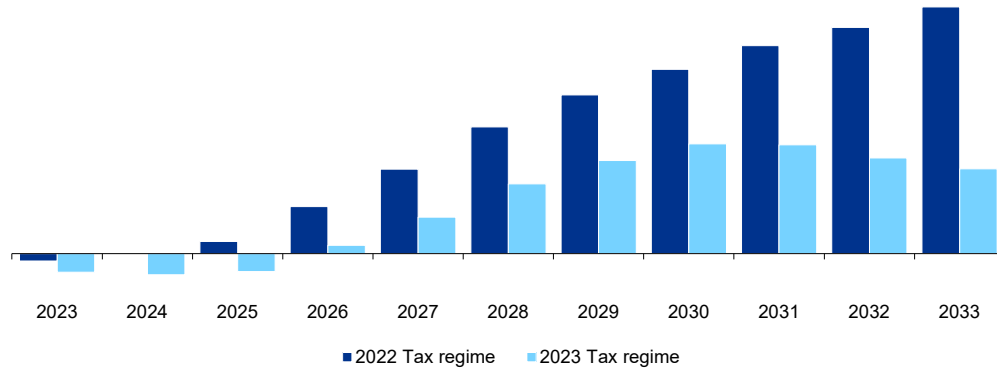
- The wind park was put into operations before 2018 and most of the tax values have been fully depreciated. As such, the initial construction/acquisition costs will not be subject to deduction in the resource rent tax, resulting in payable resource rent tax already in 2023 and negative accumulated cash flows until 2032. A significant portion of the project's production is sold on PPAs.
- With the proposed tax, the accumulated cash flow in the period 2023 to 2032 is calculated to be insufficient to meet the scheduled debt repayments, resulting in the need for additional financing.
- Please note that the calculations have been made per annum so that the effect of reduced cash flow and debt service in a given year has not taken into account increased debt and interest costs in the following year.
- With the proposed tax, the equity IRR decreases from 7% to 2%.
- Please see Appendix for more information related to the applied methodology.

Simplified equity IRR before and after the proposed tax regime



Project 2 is calculated to have insufficient cash flow to meet the scheduled debt repayments in the period 2023 to 2025

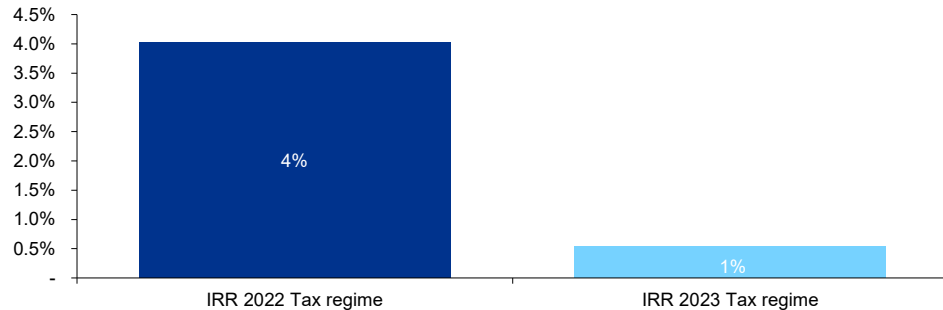
Accumulated cash flow after debt service from 2023



Description of project 2

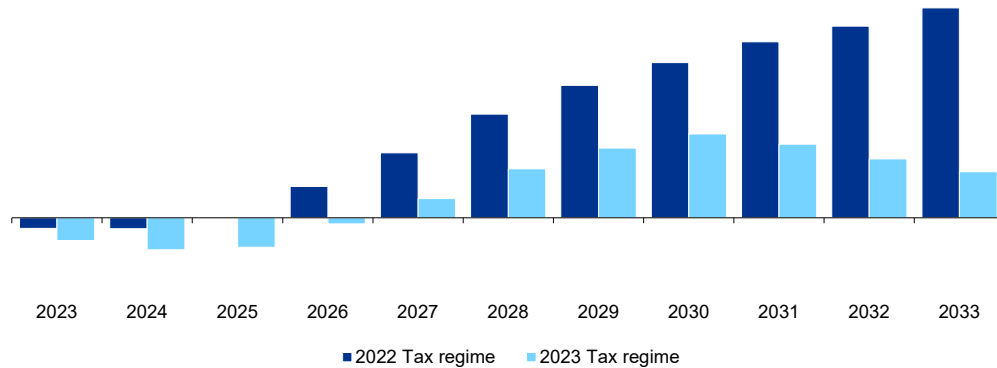
- The wind farm was put into operations after 2018 and most of the construction/acquisition costs are included in the residual tax value as of 31 December 2022. As such, tax depreciations is deducted from the resource rent income. A significant portion of the project’s production is sold on PPAs.
- Due to tax depreciation, the project will not be in a tax position for the resource rent income before 2031. Thus, the decrease in cash flows in the period 2023 to 2030 is due to payable excise duty on production and natural resource tax. Excise duty on production and natural resource rent must be paid before it can be deducted in the resource rent income.
- With the proposed tax, the accumulated cash flow in the period 2023 to 2025 is calculated to be insufficient to meet the scheduled debt repayments, resulting in the need for additional financing.
- Please note that the calculations have been made per annum so that the effect of reduced cash flow and debt service in a given year has not taken into account increased debt and interest costs in the following year.
- With the proposed tax, the equity IRR decreases from 4% to 1%.
- Please see Appendix for more information related to the applied methodology.

Simplified equity IRR before and after the proposed tax regime

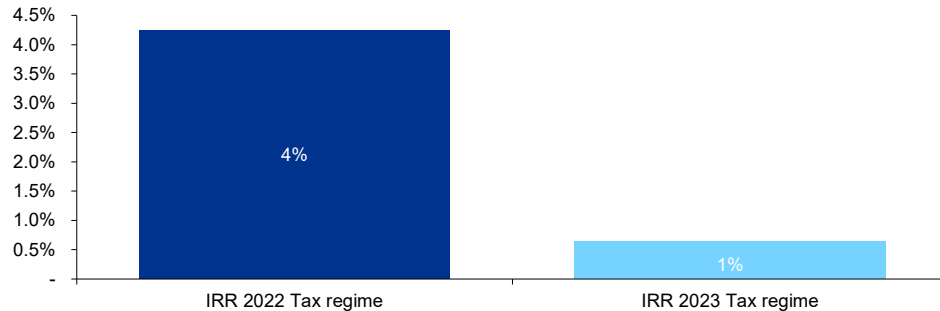


Project 3 is calculated to have insufficient cash flow to meet the scheduled debt repayments in the period 2023 to 2026

Accumulated cash flow after debt service from 2023



Simplified equity IRR before and after the proposed tax regime

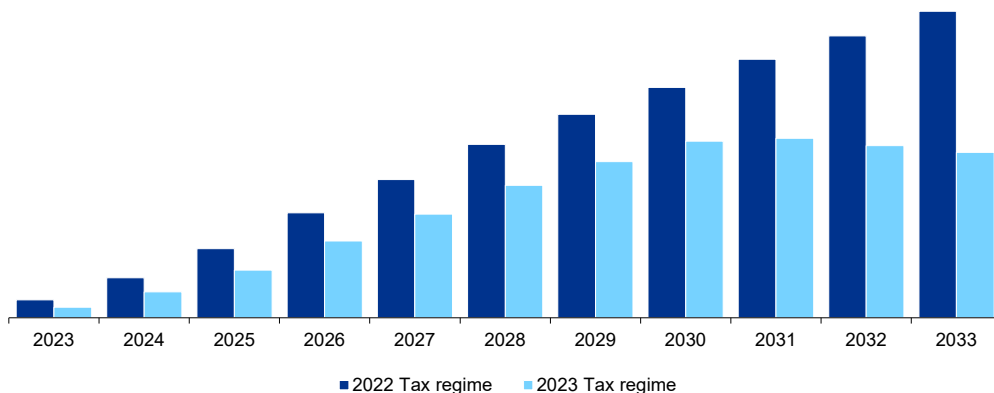


Description of project 3

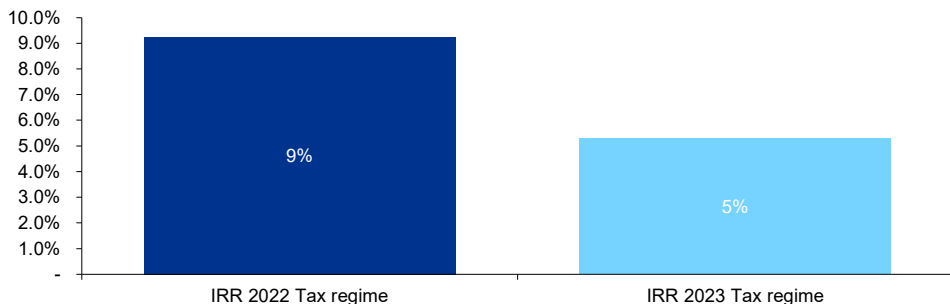
- The wind park was put into operations after 2018 and most of the construction/acquisition costs are included in the residual tax value as of 31 December 2022. As such, tax depreciations is deducted from the resource rent income. A significant portion of the project’s production is sold on PPAs.
- Due to tax depreciation, the project will not be in a tax position for the resource rent income before 2031. Thus, the decrease in cash flows in the period 2023 to 2030 is due to payable excise duty on production and natural resource tax. Excise duty on production and natural resource rent must be paid before it can be deducted in the resource rent income.
- With the proposed tax, the accumulated cash flow in the period 2023 to 2026 is calculated to be insufficient to meet the scheduled debt repayments, resulting in the need for additional financing.
- Please note that the calculations have been made per annum so that the effect of reduced cash flow and debt service in a given year has not taken into account increased debt and interest costs in the following year.
- With the proposed tax, the equity IRR decreases from 4% to 1%.
- Please see Appendix for more information related to the applied methodology.

Project 4 is expected significantly lower cash flows after to the tax proposal

Accumulated cash flow after debt service from 2023



Simplified equity IRR before and after the proposed tax regime

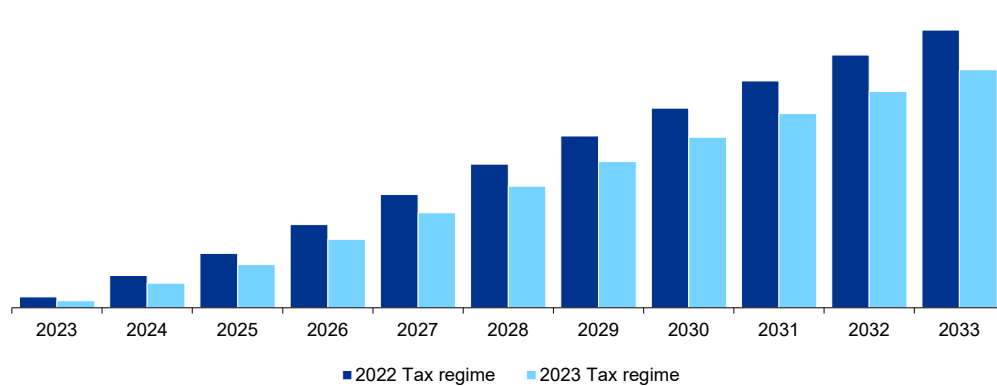


Description of project 4

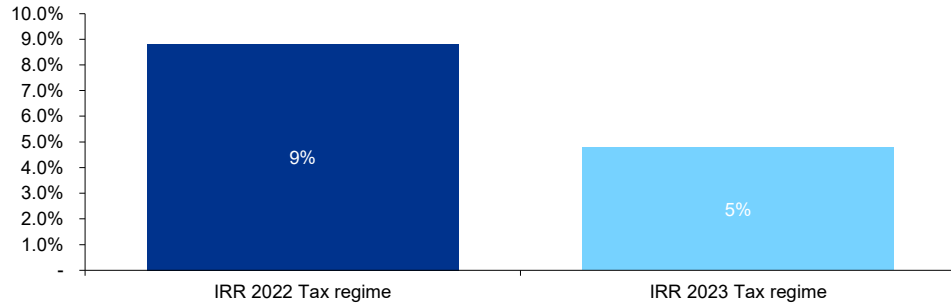
- The wind park was put into operations after 2018 and most of the construction/acquisition costs are included in the residual tax value as of 31 December 2022. As such, tax depreciations is deducted from the resource rent income. A significant portion of the project’s production is sold on PPAs.
- Due to tax depreciation, the project will not be in a tax position for the resource rent income before 2031. Thus, the decrease in cash flows in the period 2023 to 2030 is due to payable excise duty on production and natural resource tax. Excise duty on production and natural resource rent must be paid before it can be deducted in the resource rent income.
- With the proposed tax regime, the cash flows will be significantly reduced.
- Please note that the calculations have been made per annum so that the effect of reduced cash flow and debt service in a given year has not taken into account increased debt and interest costs in the following year.
- With the proposed tax, the equity IRR decreases from 9% to 5%.
- Please see Appendix for more information related to the applied methodology.

Project 5 is expected lower cash flows with the proposed tax regime

Accumulated cash flow after debt service from 2023



Simplified equity IRR before and after the proposed tax regime

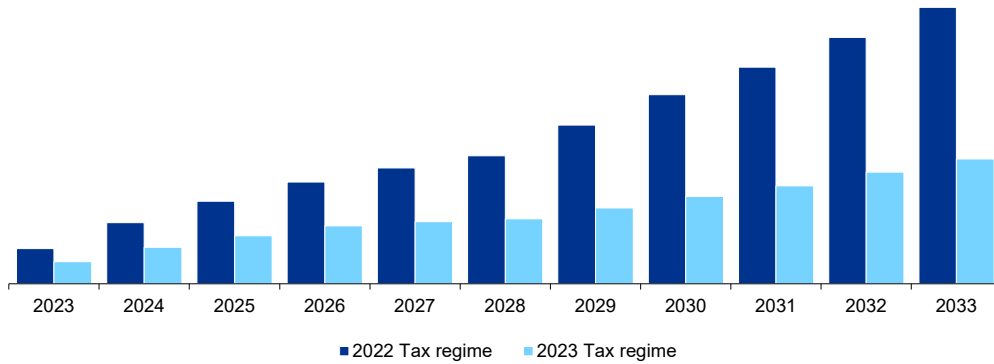


Description of project 5

- The wind park was put into operations after 2018 and most of the construction/acquisition costs are included in the residual tax value as of 31 December 2022. As such, tax depreciations is deducted from the resource rent income. A significant portion of the project's production is sold on PPAs.
- Due to tax depreciation, the project will not be in a tax position for the resource rent income before 2035. Thus, the decrease in cash flows in the period 2023 to 2034 is due to payable excise duty on production and natural resource tax. Excise duty on production and natural resource rent must be paid before it can be deducted in the resource rent income.
- With the proposed tax regime, the cash flows will be reduced.
- Please note that the calculations have been made per annum so that the effect of reduced cash flow and debt service in a given year has not taken into account increased debt and interest costs in the following year.
- With the proposed tax, the equity IRR decreases from 9% to 5%.
- Please see Appendix for more information related to the applied methodology.

Project 6 is expected significantly lower cash flows with the proposed tax regime

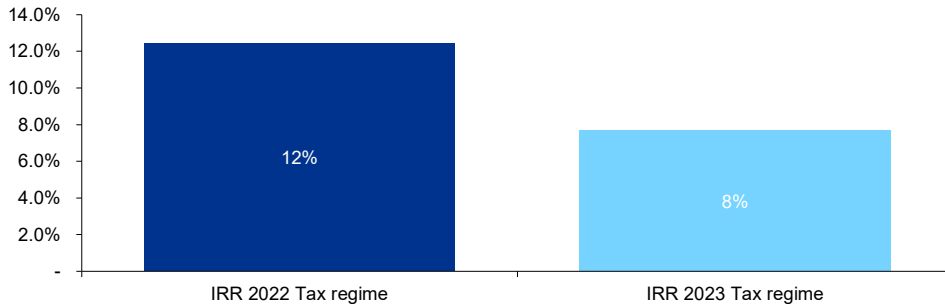
Accumulated cash flow after debt service from 2023



Description of project 6

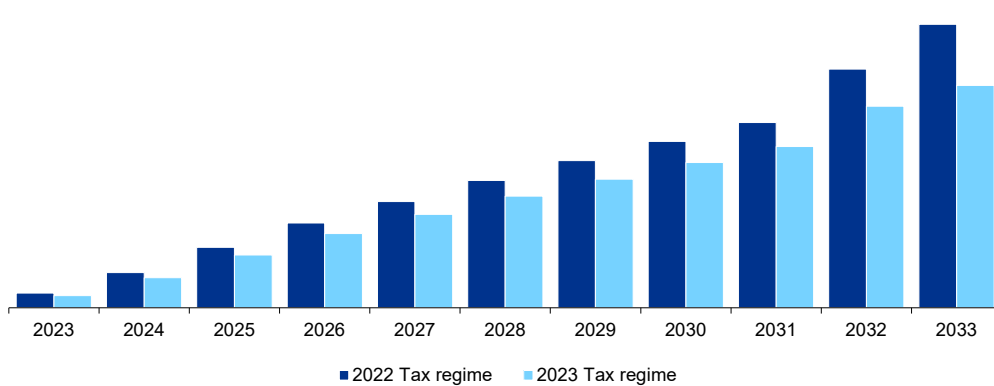
- The wind park was put into operations before 2018 and most of the tax values have been fully depreciated. As such, the initial construction/acquisition costs will not be subject to deduction in the resource rent tax, resulting in payable resource rent tax already in 2023. A significant portion of the project's production is sold on PPAs.
- With the proposed tax regime, the cash flows will be significantly reduced.
- Please note that the calculations have been made per annum so that the effect of reduced cash flow and debt service in a given year has not taken into account increased debt and interest costs in the following year.
- With the proposed tax, the equity IRR decreases from 12% to 8%.
- Please see Appendix for more information related to the applied methodology.

Simplified equity IRR before and after the proposed tax regime

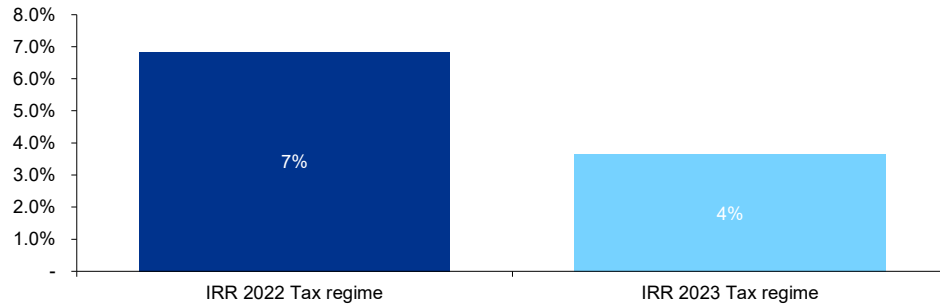


Project 7 is expected lower cash flows with the proposed tax regime

Accumulated cash flow after debt service from 2023



Simplified equity IRR before and after the proposed tax regime

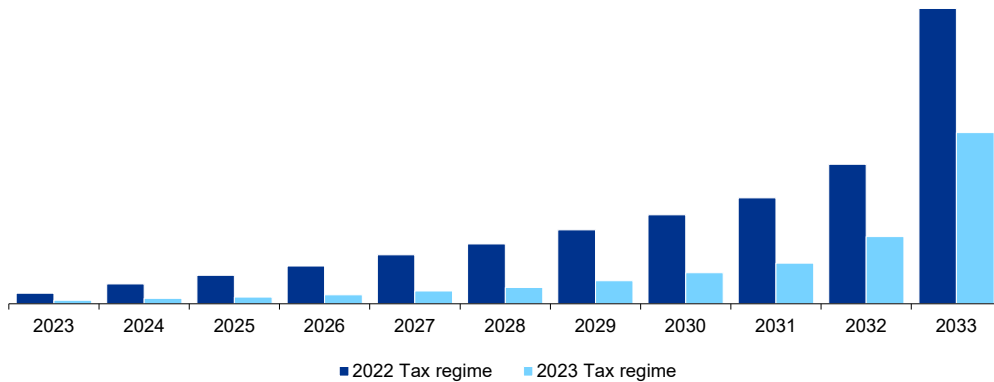


Description of project 7

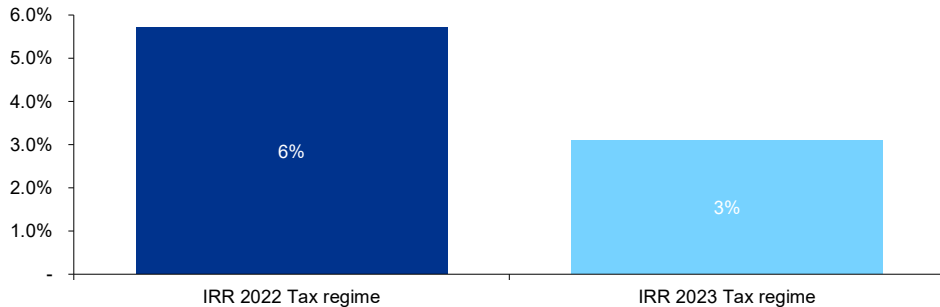
- The wind park was put into operations after 2018 and most of the construction/acquisition costs are included in the residual tax value as of 31 December 2022. As such, tax depreciations is deducted from the resource rent income. A significant portion of the project’s production is sold on PPAs.
- Due to tax depreciation, the project will not be in a tax position for the resource rent income before 2032. Thus, the decrease in cash flows in the period 2023 to 2031 is due to payable excise duty on production and natural resource tax. Excise duty on production and natural resource rent must be paid before it can be deducted in the resource rent income.
- With the proposed tax regime, the cash flows will be reduced.
- Please note that the calculations have been made per annum so that the effect of reduced cash flow and debt service in a given year has not taken into account increased debt and interest costs in the following year.
- With the proposed tax, the equity IRR decreases from 7% to 4%.
- Please see Appendix for more information related to the applied methodology.

Project 8 is expected significantly lower cash flows with the proposed tax regime

Accumulated cash flow after debt service from 2023



Simplified equity IRR before and after the proposed tax regime



Description of project 8

- The wind park was put into operations before 2018 but have a residual tax value as of 31 December 2022. As such, tax depreciation is deducted from the resource rent income. A significant portion of the project’s production is sold on PPAs.
- Due to tax depreciation, the project will not be in a tax position for the resource rent income before 2033. Thus, the decrease in cash flows in the period 2023 to 2032 is due to payable excise duty on production and natural resource tax. Excise duty on production and natural resource rent must be paid before it can be deducted in the resource rent income.
- With the proposed tax regime, the cash flows will be significantly reduced.
- Please note that the calculations have been made per annum so that the effect of reduced cash flow and debt service in a given year has not taken into account increased debt and interest costs in the following year.
- With the proposed tax, the equity IRR decreases from 6% to 3%.
- Please see Appendix for more information related to the applied methodology.



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