



# Recommendations of the Task Force on **Climate-related Financial Disclosures**

*NTR is a Signatory of the*



*NTR is a Member of*



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**WE SUPPORT**



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The bottom of the page features a decorative graphic consisting of numerous thin, wavy lines that create a sense of movement and depth. The lines are primarily light blue and yellow, with some darker blue lines interspersed, all set against the dark blue background of the page.

# Introduction

**NTR ([www.ntrplc.com](http://www.ntrplc.com)) is a renewable energy investment management group that acquires, constructs and manages assets on behalf of itself and third parties. NTR currently has two funds: a €200m onshore wind fund in UK and Ireland, and a €500m<sup>1</sup> onshore wind, solar and energy storage fund in Ireland, UK and Western continental Europe. NTR brings sectoral expertise, financing capability and operational management to its clean energy investments.**

Key aspects of our investments are:

- On-shore wind, solar and energy storage projects located in Ireland, UK and continental Western Europe.
- Investments are typically in a combination of ready to build and operating assets.
- Assessments, acquisition, construction and asset management functions are carried out by a combination of our internal experts (investment, financial and technical), together with the use of external advisors.
- Our funds comprise a diversification of technology and geography.
- All investments are independently evaluated by our Advisory Committee who advise on each investment submitted for consideration.
- Each fund's board comprises a combination of fund experts, senior members of the NTR's team and independent directors.
- All investment opportunities undergo ESG evaluation including an ESG Exclusion Checklist as part of their evaluation.
- All investments comply with relevant statutory planning, environmental, labour and fiduciary requirements and best practice.

1. *Currently in fundraising period*

02





## 04

# The Task Force on Climate Related Financial Disclosures (TCFD)

In 2015 the G20 Finance Ministers and Central Bank Governors asked the Financial Stability Board (FSB) to review how the financial sector can take account of climate-related issues.

The FSB established the Task Force on Climate-related Financial Disclosures (TCFD) in December 2015 to develop a set of voluntary consistent disclosure recommendations for use by companies in providing information to investors, lenders and insurance underwriters about their climate-related risks. Specifically, the FSB sought recommendations for more effective climate-related disclosure that: could “promote more informed investment, credit, and insurance underwriting decisions” which in turn, “would enable stakeholders to understand better the concentrations of carbon-related assets in the financial sector and the financial system’s exposures to climate-related risks.”

The TCFD issued its final report on Recommendations of the Task Force on Climate-related Financial Disclosures in June 2017. Pages 10 and 11 of this report cites examples of climate-related risks and potential financial impacts. NTR has assessed its funds’ positions against these risks. These assessments are summarised below:

## TRANSITION RISKS – Policy & Legal

- **Increased pricing of greenhouse gases** – does not negatively impact our investments as our investments are specifically in renewable energy (on-shore wind and solar) assets that have zero emissions during operation. This may, in fact, encourage improvement in pricing for our sector.
- **Enhanced emissions reporting obligations** – Our 100% renewable energy portfolios have zero emissions and so enhanced reporting obligations do not apply. However, NTR does report the CO<sub>2</sub> emissions displaced (or avoided) by our production of 100% renewable energy.
- **Mandates on and regulation of existing products and services** – The renewable energy sector is mandated to grow to address climate change challenges in all the countries in which NTR's funds are deployed. An EU-wide reduction of 40% greenhouse gas emissions by 2030 has already been agreed by Member States. The EU, along with several other Member States, have set out ambitions to reduce greenhouse gas emissions by 80% to 95% by 2050, compared with 1990 levels. An example of renewable electricity mandates is that of Ireland which has a 70% renewable electricity target by 2032 from its present 2020 performance of 32% renewable electricity. Similar targets apply across all the countries in which NTR deploys its funds under management.
- **Exposure to litigation** – The only real exposure our 100% renewables portfolio is exposed to for climate-related litigation is in relation to perceived nuisance factors or judicial review processes relating to planning. All nuisance factors are addressed throughout all stages of our investments and we typically acquire projects after planning is in place and any objection/litigation is resolved.
- **Increased operating costs (e.g. higher compliance, insurance costs)** – Compliance relative to emissions does not apply as our projects are 100% renewable energy projects. Cost of compliance is typically related to tax / fiduciary compliance, rather than climate-related risks. NTR tenders for insurance costs on a regular basis. Insurance as a percentage of operating costs is a relatively low cost which is evaluated as part of any due diligence prior to acquisition and monitored annually once the asset becomes operational.
- **Write-Offs, Asset Impairment and early retiring of existing assets due to policy changes.** As NTR assets are 100% renewable energy assets, the risk of enforced early retirement due to policy shift on climate change is low.
- **Alteration/Elimination of Revenue Support Schemes** e.g. ROCs, FIT or Feed-In-Premiums– NTR's fund's assets are operating in countries with very stable climate change policies and support schemes that have been in place for many years and are not expected to alter during the life of the projects.

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### TRANSITION RISKS - Technology

- **Substitution of existing products.** NTR invests in renewable energy technologies (wind and solar) that are leading the way in reducing the levelised cost of energy. Once constructed, our renewable energy assets are tied in to long term (15-20 year) power purchase agreements and maintenance contracts with the original equipment manufacturer (OEM), reducing the risk of being substituted by alternative technologies. NTR also has the capacity to invest in energy storage and is monitoring the extent to which long-term viable revenues are possible, due to the very real risk of technology substitution of this early stage technology in the next number of years.
- **Unsuccessful investment in new technologies** – NTR are not early adopters of new technology. NTR only uses proven technologies in its renewable energy investments.

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### TRANSITION RISKS - Market

- **Changing customer behaviour** – Changing customer behaviour is to demand cost-efficient renewable energy, an opportunity for investors in renewable energy and particularly lower cost onshore wind and solar.
- **Increased cost of raw materials** – The principal materials cost applies at the outset of construction and are priced into the investment model at the time of investment (e.g. aluminium, steel, copper for wind turbines, silicon wafers for solar PV, concrete for wind turbine foundations, lithium-ion for battery storage). Increased costs of raw material thereafter apply only to spare parts. In this regard, NTR typically agrees long term O&M contracts with the OEM that include replacement by the OEM of critical spare parts at agreed prices – prices that are set at the time of initial investment. NTR's insurance also addresses spares availability and replacement.
- **Abrupt and Unexpected Energy Cost** – As renewable energy assets, our fund's assets produce rather than consume energy and as such revenues are exposed to fluctuations in the market price for energy rather than costs. NTR's renewable energy projects avail of either a subsidy or are contracted with long term power purchase agreements to protect against abrupt and unexpected energy price variations and any increase in power prices provides an opportunity to our funds. Modelling of long-term forecasts of energy prices is carried out quarterly using independent recognised international experts in this field.



## TRANSITION RISKS – Reputation

- **Stigmatisation of the sector** – NTR’s renewable energy projects are dependent on a small number of business to business contracts. The principal stakeholder in this area is the community within which we locate our projects. NTR invests considerable efforts in its community engagement, including the provision of an annual community fund, to ensure an understanding of and acceptance of these renewable energy projects. The transition from fossil powered conventional energy to renewable energy is looked upon favourably by wider society.
- **Reputation as a good place to work** – As an investor in renewable energy, NTR’s reputation as a good place to work from a climate risk perspective is actually enhanced as is our ability to attract and retain top talent who wish to use their expertise to address climate change. NTR encourages a positive workplace with opportunities for personal development, benchmarks its employees and offers bonus and long-term incentive plans to ensure key employee retention. NTR monitors and can demonstrate a low staff turnover indicating employee satisfaction within the workplace.
- **Reduction in Capital Availability** – Due to its long history and positive reputation, NTR has relationships with many funds and major banks ensuring easy availability to capital. As our funds are invested 100% in proven renewable energy technologies, they readily attract investment capital seeking ESG opportunities. Asset backed lending or investment into renewable energy assets is perceived as a safe haven for capital during illiquid times, as was experienced during the global financial crisis and indeed the 2020 COVID-19 epidemic.

## PHYSICAL RISKS – Acute

- **Increased severity of extreme weather – Rising Sea-Levels/Flood Risk:** As on-shore wind turbines are located on high-ground, flood risk does not normally apply. Recent extreme precipitation events have solidified the need to ensure robust damp proofing and flooding construction techniques for infrastructure such as sub-stations. Flood risk assessments based on 200-year occurrences are carried out on solar projects and used to inform the investment due-diligence. Flood risk has been carried out in specific cases on wind farms, where there is a possibility of flooding. Adequate drainage is also assessed and built into construction plans.
- **Increased severity of extreme weather – High Wind:** On-shore wind turbines are designed to operate in high wind conditions, maximising power output. All wind turbines in our funds’ portfolios are designed to go into safe mode should the wind speed exceed c. 20m/s. In effect, all our wind farms are designed to operate in the most severe wind conditions anticipated at a site. Our solar farms are constructed taking into consideration the ground conditions of our sites to ensure projects are well anchored. All our assets carry physical, public liability and business interruption insurance.
- **Increased severity of extreme weather – Freezing Conditions:** Some of NTR’s wind portfolio is situated in the Nordic regions where icing can be a factor. NTR factors in the cost of de-icing in its investment projections.
- **Increased severity of extreme weather – Extreme Temperatures:** NTR only considers solar technology in areas of high temperature where increased irradiance indicates increased energy yields.

### PHYSICAL RISKS - Chronic

- **Changes in precipitation patterns** – see above
- **Changes in weather patterns** – see above
- **Rising mean temperature** – NTR's fund assets are not susceptible to rising mean temperatures forecast for the geographies in which our assets operate.
- **Rising sea levels** – NTR's fund assets are not susceptible to rising sea levels. See above.
- **Write off/Early retirement of assets** – no impact anticipated. See policy & legal above.
- **Increased operating costs** – Minimal impact anticipated due to climate-change factors as most operating costs are contracted in for the long-term at the outset and renewable energy requires very limited raw materials (spare parts only). Overall, operating costs are a relative low percentage of revenue in these capital-intensive investments.
- **Reduced revenues** – All assets' revenues are evaluated against long term forecasts by internationally recognised experts. The majority of our revenue contracts are tied into long term (10-20 year) government supports, or power purchase agreements.
- **Increased insurance cost** – The risk here is low as insurance for business interruption is a small portion of operating costs.
- **Supply chain interruptions** – The OEM contracts incorporate contracts of c. 97% availability. Supply chain interruptions (e.g. due to extreme weather condition), are predominantly at the expense of the OEM under their long-term O&M contracts. Key spare parts are typically held within a few hours travel distance from our projects. Business interruption insurance is in place.

### Resource Efficiency

- **Use of Recycling** – Production of energy through on-shore wind and solar produces incur very little by-products or waste products. Where practical, any waste products are recycled e.g. recycling of gearbox oil on turbines.
- **More Efficient Buildings** – Renewable energy projects do not have occupied buildings. The HQ of the fund is rented and where feasible, initiatives are put in place including swap out of lights to LED lights.
- **Water Usage** – there is negligible water usage on our wind turbines. Cleaning of our solar panels is primarily done naturally through falling rain.
- **Increased production capacity** – NTR continuously monitors the generating performance of its renewable energy assets and implement optimisation programs to maximise production/energy yield. All our assets have a real-time performance feed back to our Dublin HQ for monitoring by our Asset Management Team. Yield maximisation is driven by our in-house Asset Management team working with our external Asset Managers and equipment OEMs.

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## Energy Source

- Use of Lower Emissions Source – NTR objective is to displace carbon emissions by producing renewable energy with zero CO2 emissions.
- Use of Supportive Policy Incentives – Where possible, NTR has availed of renewable energy support policies secured through long-term support schemes. It diversifies its portfolio across several markets to reduce exposure to the risk of change of policy by any one jurisdiction.
- Use of New Technologies – NTR uses proven technologies and keeps abreast of changing technology in the industry through its suppliers and consultants.
- Participation in the Carbon Market – Sale of renewable energy is automatically linked to the carbon market, being a revenue source for the renewable industry. The renewable energy industry is not exposed to carbon prices in its cost line.

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## Products and Services

- Low Emission Product – Production of renewable energy is a zero emissions technology.
- Diversification – NTR's investments invest in on-shore wind, solar and energy storage across the geographic areas of Ireland, UK and Western Europe. Country and project investment concentration limits are in place.

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## Markets

- Access to New Markets – the development of renewable energy generators provides opportunity for NTR as it continues to be a growing market worldwide as the world attempts to move to a low carbon economy. NTR's funds dictate the markets in which we operate.

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## Resilience

- Increased Reliability of Supply Chain – NTR continues to work with global leaders in developing and operating the most effective and robust renewable energy generators. NTR requests that its Tier 1 supply chain adhere to the principles espoused under the principles of the UN Global Compact.

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# 12 Reference

a) Final Report - Recommendations of the Task Force on  
Climate-related Financial Disclosures  
- March 2017

[Download here](#)

b) Task Force on Climate-related Financial  
Disclosures Overview  
- March 2020

[Download here](#)





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