PRE-ISSUANCE 2ND PARTY OPINION

VESTAS WIND SYSTEMS A/S SUSTAINABILITY-LINKED BOND FRAMEWORK DATED 4 FEBRUARY 2022

Prepared by: DNV Business Assurance Norway AS

Location: Oslo, Norway

Date: 4 February 2022

Ref. Nr.: SPO-287909-2022-BA NO

Contents

VESTAS WIND SYSTEMS A/S SUSTAINABILITY-LINKED BOND FRAMEWORK 3

PRE-ISSUANCE 2ND PARTY OPINION 3
Scope and objectives 3
Responsibilities of the Management of VESTAS and DNV 4
Basis of DNV's opinion 4
Work undertaken 5
Findings and DNV's opinion 5

SCHEDULE 1: DESCRIPTION OF VESTAS' KEY PERFORMANCE INDICATORS (KPI) AND 8

SUSTAINABILITY PERFORMANCE TARGETS (SPT) 8
1.1 KPI's 8
1.2 SPT's 10

SCHEDULE 2: SUSTAINABILITY-LINKED BOND ELIGIBILITY ASSESSMENT 13
1. Selection of Key Performance Indicators (KPIs) 13
2. Calibration of Sustainability Performance Targets (SPTs) 18
3. Bond Characteristics 24
4. Reporting 26
5. Verification 27

[1] DNV Code of Conduct is available on the DNV website (www.dnv.com)

VESTAS WIND SYSTEMS A/S SUSTAINABILITY-LINKED BOND FRAMEWORK

PRE-ISSUANCE 2ND PARTY OPINION

Scope and objectives

DNV Business Assurance Norway AS (henceforth referred to as "DNV") has been commissioned by Vestas Wind Systems A/S (henceforth referred to as "VESTAS" or "ISSUER") to provide a 2nd party opinion on VESTAS' Sustainability-Linked Bond Framework (the "Framework").

VESTAS is a global designer, manufacturer, seller, installer and servicer of wind turbines. The company focuses on onshore and offshore wind and hybrid sustainable energy solutions and has so far installed 151GW of wind turbines in 85 countries globally. VESTAS is headquartered in Aarhus, Denmark, with sales and service, production and research sites located globally. VESTAS consolidated its offshore wind practices in December 2020, following its acquisition of Mitsubishi Heavy Industries' 50% stake in MHI VESTAS.

The Framework enables issuance of Sustainability-Linked Bonds (referred to as "Sustainability-Linked Bonds" or "BONDS"), to finance general corporate purposes in VESTAS, where VESTAS commits to future sustainability improvements within a predefined timeline.

VESTAS will measure its environmental sustainability performance on a consolidated corporate level against the following Sustainability Performance Targets (SPTs):

1. Reducing CO2 equivalents (CO2e) emissions in its own operations by 100% in 2030, from a 2019 baseline, without using carbon offsets.
2. Reducing CO2e emissions intensity in the supply chain by 45% per MWh by 2030, from a 2019 baseline.
3. Reducing non-recyclable waste by 90% per MW by 2030, from a 2021 baseline.

VESTAS has chosen to measure performance against the SPTs through three corresponding Key Performance Indicators (KPIs), which are defined as:

1. Absolute Scope 1 and 2 Greenhouse Gas (GHG) emissions.
2. Scope 3 GHG emissions intensity, calculated per MWh to be generated from wind turbines produced and shipped in the financial year.
3. Total tonnes of non-recycled waste from own operations per MW produced and shipped in the financial year (referred to as "material efficiency ratio").

Our objective has been to provide an assessment on whether the Sustainability-Linked Bonds to be issued under the Framework meet the criteria established within the Sustainability-Linked Bond Principles June 2020 ("SLBP") set out by the International Capital Market Association (ICMA). Our methodology to achieve this is described under 'Work Undertaken'. No assurance is provided regarding the financial performance of the BONDS, the value of any investments, or the long-term environmental and/or societal benefits of the associated transactions.

Responsibilities of the Management of VESTAS and DNV

The management of VESTAS has provided the information and data used by DNV during the delivery of this review. Our statement represents an independent opinion and is intended to inform VESTAS management and other interested stakeholders in the BONDS as to whether the established criteria have been met, based on the information provided to us. In our work we have relied on the information and the facts presented to us by VESTAS. Thus, DNV shall not be held liable if any of the information or data provided by VESTAS' management and used as a basis for this assessment were not correct or complete.

Basis of DNV's opinion

We have adapted our Sustainability-Linked Bond Principles methodology, which incorporates the requirements of the SLBP, to create a VESTAS-specific Sustainability-Linked Bond Eligibility Assessment Protocol (henceforth referred to as "Protocol"). Our Protocol includes a set of suitable criteria that can be used to underpin DNV's opinion. The overarching principle behind the criteria is that a Sustainability-Linked Bond should "*provide an investment opportunity with transparent sustainability credentials*". As per our Protocol, the criteria against which the Framework has been reviewed are grouped under the five Principles:

- **Principle One: Selection of Key Performance Indicators (KPIs).** The ISSUER of a sustainability-linked bond should clearly communicate its overall sustainability objectives, as set out in its sustainability strategy, and how these relate to its proposed SPTs. The KPI should be reliable, material and core to the ISSUER's sustainability and business strategy, measurable and quantifiable on a consistent methodological basis, externally verifiable and address relevant Environmental, Social and Governance ("ESG") challenges of the industry sector and be under management control.
- **Principle Two: Calibration of Sustainability Performance Targets (SPTs)**. The SPTs should be ambitious, meaningful and realistic. The target setting should be done in good faith and based on a sustainability improvement in relation to a predetermined performance target benchmark.
- **Principle Three**: **Bond Characteristics.** The bond will need to include a financial and/or structural impact depending on whether the selected KPIs reach (or not) the predefined SPTs. The bond documentation needs to require the definitions of the KPI(s) and SPT(s) and the potential variation of the SLB's financial and/or structural characteristics. Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner should be explained.
- **Principle Four: Reporting**. ISSUERS should publish and keep readily available and easily accessible up to date information on the performance of the selected KPI(s), as well as a verification assurance report (see Principle 5) outlining the performance against the SPTs and the related impact and timing of such impact on the bond's financial and/or structural characteristics, with such information to be provided to those investors participating in the bond at least once per annum.
- **Principle Five: Verification (Post-issuance)**. The ISSUER should have its performance against its SPTs independently verified by a qualified external reviewer with relevant expertise, at least once per annum. The verification of the performance against the SPTs should be made publicly available.

Work undertaken

Our work constituted a high-level review of the available information, based on the understanding that this information was provided to us by VESTAS in good faith. We have not performed an audit or other tests to check the veracity of the information provided to us. The work undertaken to form our opinion included:

- Creation of a VESTAS-specific Protocol, adapted to the purpose of the BONDS, as described above and in Schedule 2 to this 2nd Party Opinion,
- Assessment of documentary evidence provided by VESTAS on the BONDS and supplemented by a high-level desktop research. These checks refer to current assessment best practices and standards methodology,
- Discussions with VESTAS management, review of relevant documentation including planned and/or anticipated measures in the form of a Detailed Action Plan List related to the KPIs in the Framework,
- Documentation of findings against each element of the criteria.

Our opinion as detailed below is a summary of these findings.

Findings and DNV's opinion

DNV's summary findings are listed below, with further detail provided in Schedule 2. Schedule 1 provides a description of the KPIs and SPTs.

1. **Principle One: Selection of Key Performance Indicators (KPIs).** DNV confirms that VESTAS' KPIs on absolute scope 1 and 2 GHG emissions, scope 3 GHG emissions intensity as well as material efficiency are core and material to the company's broader business and sustainability strategy and addresses key environmental issues within the industry the company operates. The rationale for KPI selection is deemed robust, as it is the result of a rigorous internal process that has identified the key environmental, social and governance (ESG) issues for VESTAS. DNV further concludes that the KPIs selected have clearly defined parameters that are robust and reliable, measurable and quantifiable on a consistent methodological basis. DNV concludes that the KPIs are in accordance with the SLBP.

2. **Principle Two: Calibration of Sustainability Performance Targets (SPTs).** DNV concludes that the three SPTs provide meaningful reductions in line with VESTAS' business and sustainability strategy and constitute a material improvement in the three KPIs defined to 2030. DNV is of the opinion that the integration of MHI-Vestas Offshore Wind into VESTAS' SPTs results in a higher ambition level, as it incorporates new offshore design, manufacturing and service assets.

   DNV has reviewed the SPTs in the context of VESTAS' peers and conclude that they are best in class. The portfolio of measures planned by VESTAS provide viable routes to delivering on the targets outlined:

   - For SPT 1, absolute scope 1 and 2 CO_2e emissions reductions will be delivered by a combination of electrification and switching to renewable fuels – with carbon offsets being excluded as a viable route to achieving carbon neutrality in own operations by 2030. DNV notes that VESTAS is the only wind turbine manufacturer to explicitly exclude the use of carbon offsets, highlighting the high level of ambition of this SPT. The consumption of renewable electricity will be documented through a market-based approach to scope 2 reporting.

   - For SPT 2, the delivery on the scope 3 emissions intensity reductions to 2030 will follow a phased approach, where VESTAS will improve data access and deepen supply chain

collaboration in the early 2020s, forming the basis for supply chain emission reductions in the mid-to-late 2020s. The adoption of electric arc furnace (EAF) steel and 'green' steel will also play a key role in accelerating scope 3 emission intensity reductions in beyond 2025. As such, delivering on the SPT requires the adoption of emerging technology. While the SPT trajectory for SPT 2 is non-linear and first registers a notable acceleration in the mid-to-late 2020s, DNV concludes that the nascent state of scope 3 reporting in the energy industry at present, combined with VESTAS' outlined holistic approach to supply chain emissions reporting and target setting, as well as the dependence on new technology, ensures that the SPT trajectory is well beyond a business-as-usual (BAU) scenario. DNV further notes that no VESTAS peer has publicly adopted an equivalent near-term scope 3 target.

- For SPT 3, the 2030 target will be achieved through a combination of design improvements, supply chain partnerships, and specific local, regional, and global waste reduction plans combined with landfilling and incineration reduction targets. DNV opines that VESTAS' decision to specifically exclude waste incineration with energy recovery as a viable route to reach the target makes this SPT ambitious. While there are no directly comparable industry benchmarks for this SPT, DNV considers this to reflect the relatively immature state of circularity strategies with concrete material efficiency targets within the industry. This underscores VESTAS' intention to take position as a global circularity strategy spearhead.

In summary, DNV deems the SPTs and related SPT trajectories up to 2030 to represent an ambitious and realistic pathway to lowering VESTAS' environmental footprint in a meaningful way that is firmly positioned within the ISSUER's existing sustainability strategy. The targets firmly highlight VESTAS ambition to take a global lead in addressing core environmental challenges for the wind industry, namely to reduce **i)** the value chain carbon footprint of the wind industry, and **ii)** wind industry waste through increased material efficiency. DNV confirms this is in accordance with the requirements listed by the SLBP.

3. **Principle Three: Bond Characteristics.** DNV has reviewed the Framework and can confirm that the financial characteristics of any BOND issued under this Framework will depend on KPI performance under the relevant SPTs, as required by the SLBP. The financial characteristics and relevant target observation dates for a BOND will be outlined in the corresponding bond documentation. This will be in the form of changes to the interest rate, if one or more SPTs are not met on the relevant target observation date.

4. **Principle Four: Reporting.** DNV concludes that the framework will ensure that the required information, as outlined by the SLBP, will be published at an appropriate interval and kept publicly available.

5. **Principle Five: Verification.** DNV confirms that VESTAS will have its KPI performance against each SPT independently verified on an annual basis. This in line with the SLBP requirements.

On the basis of the information provided by VESTAS and the work undertaken, it is DNV 's opinion that the VESTAS Sustainability-Linked Bond Framework meets the criteria established in the Protocol and that it is aligned with the stated definition of Sustainability-Linked Bonds within the SLBP, which is to *"incentivize the issuer's achievement of material, quantitative, pre-determined, ambitious, regularly monitored and externally verified sustainability (ESG) objectives through KPIs and SPTs"*, thereby providing *"an investment opportunity with transparent sustainability credentials"*.

For DNV Business Assurance Norway AS

Oslo, 4th February 2022

Daniel Brenden
Consultant and Project Manager
DNV – Energy Systems

Mark Robinson
Senior Reviewer
DNV – Business Assurance

Tore Eliassen
Principal Consultant
DNV – Energy Systems

Maja Frost
Consultant
DNV – Energy Systems

About DNV

Driven by our purpose of safeguarding life, property and the environment, DNV enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers' decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight.

With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 12,000 professionals are dedicated to helping customers make the world safer, smarter and greener.

SCHEDULE 1: DESCRIPTION OF VESTAS' KEY PERFORMANCE INDICATORS (KPI) AND SUSTAINABILITY PERFORMANCE TARGETS (SPT)

1.1 KPI's

VESTAS has chosen to select three KPIs to assess its environmental performance, being GHG emissions in own operations, GHG emissions from the supply chain and material efficiency in own operations:

1. **GHG EMISSIONS FROM OWN OPERATIONS - Defined as total Scope 1 and 2 GHG emissions**

VESTAS has chosen to measure total absolute scope 1 and scope 2 GHG emissions – with the definitions for scope 1 and 2 GHG emissions aligned with that of the GHG Protocol. A market-based approach is used to measure scope 2 emissions. DNV notes that the historic data for 2019 and 2020 entail an adjusted dataset that consolidates the datasets from Vestas Wind Systems (onshore) and MHI Vestas (offshore) and is externally verified. From 2021, the dataset reported on is based on unified reporting by the onshore and offshore business segments. The KPI for scope 1 and 2 emissions is aligned with VESTAS' existing validated Science Based Targets initiative (SBTi) target from 2020 for scope 1 and 2 emissions.

2. **GHG EMISSIONS FROM THE SUPPLY CHAIN - Defined as Scope 3 GHG emissions per MWh**

VESTAS has chosen to measure the intensity of its scope 3 GHG emissions against MWh generated. The definitions for scope 3 GHG emissions are aligned with the GHG Protocol and follows the specific guidance from the 'Corporate Value Chain Accounting and Reporting Standard'. For this KPI, VESTAS includes all the scope 3 categories that are considered relevant to the company and thus reported on to cover its scope 3 emissions[2]. A 70% share of the total reported scope 3 emissions is then reported. This is in line with the Criterion 18 of the SBTi Criteria and Recommendations TWG-INF-002 version 4.2, which stipulates that a scope 3 target must capture at least 2/3 of total scope 3 emissions[3]. The MWh generation component is defined as being calculated on the MWh to be generated from the number and types of wind turbines produced and shipped over the financial year, and their wind turbine capacity factors and lifetimes. The boundaries for KPI 2 are aligned with VESTAS' existing Science Based Targets initiative (SBTi) validated scope 3 target from 2020.

[2] The relevant categories for Vestas are categories 1, (purchased goods and services), 2 (capital goods), 3 (fuel-and-energy related activities not included in scope 1 and 2), 4 (upstream transportation and distribution), 5 (waste generated in operations), 6 (business travel), 7 (employee commuting), 12 (end of life treatment of sold products) and 15 (investments). Category 9 (downstream transportation and distribution) is reported under category 4.

[3] https://sciencebasedtargets.org/resources/files/SBTi-criteria-legacy.pdf

3. MATERIAL EFFICIENCY IN OWN OPERATIONS – Defined as total tonnes non-recycled waste per MW

VESTAS has chosen to measure the intensity of non-recycled waste in own operations against the aggregated capacity in MW of the wind turbines produced and shipped per year. The non-recycled waste measured in this KPI includes waste that goes to incineration, including incineration with energy recovery, as well as waste going to landfill.

1.2 SPT's

1. REDUCING CO_2e EMISSIONS IN OWN OPERATIONS 100% BY 2030 COMPARED TO 2019, WITHOUT USING CARBON OFFSETS

VESTAS has chosen to assess its GHG emission reduction objective against a predefined trajectory of annual absolute scope 1 and 2 GHG emission levels towards 2030. The SPT 1 trajectory outlined requires a relatively steady rate of progress over the coming decade with a 55% reduction required by 2025 from a 2019 baseline, and 100% reduction required by 2030.

The main measures listed for delivering the outlined SPT trajectory prior to 2025 are focusing on the transition to renewable heating for several VESTAS factories. Other key measures include the eventual transition to a fully renewables-fuelled fleet of vessels and the full electrification of company benefit cars. Post-2025, the initiatives that will enable VESTAS to meet its SPT trajectory will include the switching to renewable energy for heating in additional factories, as well as the electrification of company vehicles, moving equipment, and construction activities.

The SPT trajectory is presented below, where:

- 2019 is set as the baseline, following the consolidation of VESTAS and MHI Vestas data for 2019 and 2020. From 2021, reporting was unified for the onshore and offshore units under VESTAS. PWC has verified the historic data for 2019 and 2020 and ensured the veracity of the consolidated baseline.
- Bond documentation related to future issuance will specify what year will constitute the target observation date for the specific security in question.

Year (end of period)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Thousand tons CO_2e emissions	114	97	102	98	94	82	51	44	37	30	25	0
Percentage improvement from baseline	0	15	11	14	18	28	55	61	68	74	78	100

2. REDUCING CO_2e EMISSIONS IN THE SUPPLY CHAIN BY 45% PER MWh BY 2030 COMPARED TO 2019

VESTAS has chosen to assess its scope 3 GHG emission reduction objective against a predefined trajectory of GHG emission intensity levels per MWh to be generated by turbines produced and shipped per year towards 2030. The SPT trajectory outlined for SPT 2 is non-linear, and projects the improvements to largely occur after 2025 and to accelerate after 2028.

This reflects the phased implementation of measures to facilitate the scope 3 reduction outlined by VESTAS. The first stage in the early 2020s entails the development of a new digital platform that collects primary data on climate and circularity from suppliers to improve data access and quality and enabling benchmarking of suppliers. Furthermore, about 50 strategic suppliers comprising about 50% of VESTAS' material spend are required to measure and set targets for scope 1 and 2 emissions, a commitment also set to include scope 3 emissions by 2022, which in total makes up VESTAS' scope 3 emissions throughout the value chain. Towards the mid-2020s, the combination of better data access and supplier benchmarking will enable VESTAS to introduce incentives for suppliers to lower their carbon footprint. Beyond the mid-2020s, an acceleration in scope 3 emission reductions is expected to largely come from the lower carbon intensity of EAF steel and eventually green steel, as well as from expected supplier progress in reducing their scope 1 and 2 emissions. DNV notes that VESTAS performance under this KPI depends on a range of assumptions to calculate the MWh to be generated, such as the development of wind turbine capacity factors and lifetimes. DNV assumes that VESTAS will document changes to such assumptions and make this available to investors.

The SPT trajectory is presented below, where:

- 2019 is set as the baseline, following the consolidation of VESTAS and MHI Vestas data for 2019 and 2020. From 2021, reporting was unified for onshore and offshore units by VESTAS. PWC has verified the historic data for 2019 and 2020 and ensured the veracity of the consolidated baseline.
- Bond documentation related to future issuance will specify what year will constitute the target observation date for the specific security in question.

Year (end of period)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Kg Scope 3 CO_2e emissions per MWh to be generated	6,82	6,63	6,65	6,65	6,65	6,47	6,29	6,10	5,93	5,31	4,71	3,74
Percentage improvement from baseline	0	3	3	3	3	5	8	11	13	22	31	45

3. MATERIAL EFFICIENCY TO BE 0.2 TONNES IN OWN OPERATIONS PER MW BY 2030 – TOTALLING A 90% REDUCTION FROM A 2021 BASELINE

VESTAS has chosen to assess its material efficiency intensity improvement objective against a predefined trajectory of non-recycled waste from its own operations per MW produced and shipped per year. The SPT trajectory indicates a relatively steady rate of progress – with VESTAS' recently released Circularity Roadmap towards zero waste turbines by 2040 from October 2021 forming the basis for the plan of action. The plan focuses on optimising design, operational circularity and material recovery. This includes reducing waste from blade manufacturing with specific local and regional waste reduction targets and increased use of refurbished turbine components. VESTAS also stipulates specific targets for landfill, waste incineration and waste-to-energy for 2030 that are dependent on a steady ramp up over the 2020s, with most of the landfill reductions set to occur prior to 2025. DNV notes that VESTAS performance under this KPI depends on the level of subcontractors used, vis-à-vis own manufacturing. VESTAS strategy is not to outsource large parts of their core business and DNV notes that significant changes to this strategy will trigger a KPI baseline recalculation as outlined in the fallback mechanisms section of the Framework.

The SPT trajectory is presented below, where:

- 2021 is set as the baseline, as this was the first year that the material efficiency KPI was disclosed in VESTAS' sustainability reporting. The 2021 baseline thus represents the first possible baseline that incorporates VESTAS-owned facilities that supply both the onshore and offshore business segments. The baseline is verified by PWC.
- Bond documentation related to future issuance will specify what year will constitute the target observation date for the specific security in question.

Year (end of period)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Tonnes waste excl. recycled per MW produced and shipped	2,0	1,9	1,7	1,5	1,2	1,0	0,8	0,6	0,4	0,2
Percentage improvement from baseline	0	6	16	25	39	50	60	70	80	90

SCHEDULE 2: SUSTAINABILITY-LINKED BOND ELIGIBILITY ASSESSMENT

1. Selection of Key Performance Indicators (KPIs)

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1a	KPI – material to core sustainability and business strategy	The issuer's sustainability performance is measured using sustainability KPIs that can be external or internal. The KPIs should be material to the issuer's core sustainability and business strategy and address relevant environmental, social and/or governance challenges of the industry sector and be under management's control. The KPI should be of high strategic significance to the issuer's current and/ or future operations. It is recommended that issuers communicate clearly to investors the rationale and process according to which the KPI(s) have been selected and how the KPI(s) fit into their sustainability strategy.	Review of: - VESTAS Sustainability-Linked Bond Framework - VESTAS Annual Report 2020 - Sustainability at Vestas 2021 internal slide deck - VESTAS Sustainability Report 2020 - VESTAS Circularity Roadmap - VESTAS Wind Systems AS CDP Climate Change Questionnaire 2021 - Formal Q&A Process Documentation Discussions with VESTAS management	DNV has reviewed the absolute Scope 1 and 2 emissions, scope 3 intensity and material efficiency KPIs chosen by VESTAS, and can confirm that they are material and core to the company's sustainability and business strategy. DNV notes that the three KPIs outlined are topics with the highest materiality scores in VESTAS 2020 Sustainability Report and are thus the result of a rigorous internal process firmly under the control of the VESTAS management. Aligning with VESTAS own materiality assessment, DNV considers the three KPIs to be highly relevant to addressing key environmental challenges within the sector the company operates. **KPI 1:** By addressing scope 1 and 2 emissions without allowing the use of carbon offsets, VESTAS commits itself to reducing all direct emissions under its own control. The KPI is the same as that reported in the Sustainability Report from 2020, and the science-based target aligned with limiting global warming to 1.5°C validated in 2020. **KPI 2:** By reducing scope 3 emissions per MWh produced and shipped, VESTAS commits itself to reducing emissions intensity that are indirectly a result of their business operations. By committing to working with its supply chain and seeking to implement low-carbon solutions, VESTAS is taking responsibility for all its indirect value-chain emissions – which makes up about 99% of the company's entire carbon footprint. In line with the nascent state of scope 3 emission reporting to date, and to an even lesser extent

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				target setting, DNV is of the opinion that KPI 2 addresses a highly relevant and key environmental issue in the energy sector generally. The KPI is the same as that reported in the 2020 Sustainability Report, and the science-based target aligned with limiting global warming to 2°C which was validated in 2020. **KPI 3:** By reducing non-recycled waste per MW produced and shipped, VESTAS commits itself to substantially reducing the environmental footprint of its operations. DNV considers resource circularity to be a key aspect of further improving the environmental characteristics of wind power and this KPI thus reflects VESTAS push to take a more holistic approach to lowering its environmental footprint. Given that this KPI includes waste to landfills, as well as waste incinerated both with and without energy recovery, VESTAS is required to implement solutions that are highly recyclable and circular. This KPI is thus firmly positioned within VESTAS circularity roadmap from October 2021, which has the ultimate ambition of producing zero-waste wind turbines by 2040.
1b	KPI - Measurability	KPIs should be measurable or quantifiable on a consistent methodological basis; externally verifiable; and able to be benchmarked, i.e. as much as possible using an external reference or definitions to facilitate the assessment of the SPT's level of ambition. Issuers are encouraged, when possible, to select KPI(s) that they have already included in their previous annual reports,	Review of: - VESTAS Sustainability-Linked Bond Framework - VESTAS Annual Report 2020 - Sustainability at Vestas 2021 internal slide deck - VESTAS Sustainability Report 2020 - VESTAS Circularity Roadmap 2021	**KPI 1:** DNV concludes the scope 1 and 2 emissions KPI is quantifiable on a consistent methodological basis and forms a key component of VESTAS' existing externally verified sustainability reporting. VESTAS' methodology is aligned with the GHG protocol, and DNV can further confirm that the scope 2 reporting for this KPI is based on a market-based approach (see schedule 1). DNV also opines that the KPI has appropriate external references (see 2c for further detail), also considering that VESTAS' definition and targets for KPI 1 are already validated by science-based targets initiative. Under the SBTi, the SPT 1 is already considered in alignment with limiting global warming to 1.5°C compared to pre-

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		sustainability reports or other non-financial reporting disclosures to allow investors to evaluate historical performance of the KPIs selected. In situations where the KPIs have not been previously disclosed, issuers should, to the extent possible, provide historical externally verified KPI values covering at least the previous 3 years.	- Vestas Wind Systems AS CDP Climate Change Questionnaire 2021 - Material Use Brochures - Selection of KPIs – Material Efficiency internal document - Formal Q&A Process Documentation - SBTi Criteria and Recommendations, TWG-INF-002 Version 4.2 Discussions with VESTAS management	industrial levels. DNV also considers the inclusion of MHI Vestas to this KPI and corresponding SPT to further support the high level of ambition of the KPI, by extending the target to the offshore wind business segment. VESTAS has resubmitted a baseline that incorporates MHI Vestas to SBTi with the aim to maintain this target. An externally verified consolidated KPI baseline that includes MHI Vestas for 2019, 2020 and 2021 is disclosed in the Framework. The verification has been undertaken by PWC. DNV deems this in line with the SLBP. **KPI 2:** DNV concludes that the scope 3 emissions intensity KPI is quantifiable on a consistent methodological basis, with the KPI already disclosed in existing externally verified sustainability reporting. The scope 3 reporting is in alignment with the GHG Protocol and captures 70% of VESTAS' scope 3 footprint. Scope 3 emissions intensity will then be calculated based on MWh to be generated from turbines produced and shipped per year (see schedule 1). As with KPI 1, the SPT 2 is also already validated by the SBTi and thus has an appropriate external reference (see 2c for further details). At the time of previous scope 3 target validation, VESTAS was in line with limiting global warming to 2°C – which to DNV's understanding was the highest specification for scope 3 targets under SBTi at the time of approval. VESTAS has resubmitted a baseline that incorporates MHI Vestas to SBTi with the aim to maintain this target. An externally verified consolidated KPI baseline that includes MHI Vestas for 2019, 2020 and 2021 is disclosed in the Framework.

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				The verification has been undertaken by PWC. DNV deems this in line with the SLBP. **KPI 3:** DNV concludes that the material efficiency KPI is quantifiable on a consistent methodological basis. VESTAS will measure total tonnes of non-recycled waste from own operations per MW produced and shipped per year (see schedule 1). This includes waste going to landfills or incineration, the latter also including energy recovery. This is a KPI that VESTAS first reported on in its Circularity Roadmap from October 2021. There are no directly comparable industry benchmarks for KPI 3 (see 2c for more detail). That said, DNV considers this to reflect the relatively nascent state of circularity strategies with concrete material efficiency targets within the industry, underscoring the VESTAS intention to take position as a global circularity strategy spearhead. An externally verified consolidated KPI baseline that includes MHI Vestas for 2021 is disclosed in the Framework, as 2021 was the first year VESTAS reported on this KPI. The verification has been undertaken by PWC. Historic KPI performance for 2019 and 2020 excludes MHI Vestas and can thus only represent a proxy for performance, as this KPI was first reported on for the onshore and offshore units for 2021. Given that no consolidated baseline exists prior to 2021, DNV deems the one year of verified historic data disclosed to be in line with the SLBP.

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1c	KPI – Clear definition	A clear definition of the KPI(s) should be provided and include the applicable scope or perimeter as well as the calculation methodology	Review of: - VESTAS Sustainability-Linked Bond Framework - VESTAS Annual Report 2020 - Sustainability at Vestas 2021 internal slide deck - VESTAS Sustainability Report 2020 - VESTAS Circularity Roadmap - Vestas Wind Systems AS CDP Climate Change Questionnaire 2021 - Formal Q&A Process Documentation Discussions with VESTAS management	DNV confirms that the KPIs chosen by VESTAS are clearly defined in the Framework, including their respective scopes and calculation methodologies. • **KPI 1:** The calculation methodology for absolute scope 1 and 2 GHG emissions is aligned with the GHG protocol. The use of carbon offsets is not permitted to reduce GHG emissions year-on-year. • **KPI 2:** The calculation methodology for scope 3 emissions is aligned with the GHG protocol – with the GHG protocol categories and components selected by VESTAS being clearly defined to be 70% of total scope 3 emissions from all the relevant categories under the GHG protocol (see schedule 1). The MWh generation component is defined as being derived from to be generated power from the number and types of wind turbines produced and shipped over the financial year. • **KPI 3:** The calculation methodology for material efficiency is clearly defined as waste from VESTAS' own operations that is landfilled or incinerated – also including for energy recovery - compared to the MW produced and shipped per year.

2. Calibration of Sustainability Performance Targets (SPTs)

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a	Target Setting - Meaningful	The SPTs should be ambitious, realistic and meaningful to the issuer's business and be consistent with the issuers' overall strategic sustainability/ESG strategy	Review of: - VESTAS Sustainability-Linked Bond Framework - VESTAS Annual Report 2020 - Sustainability at Vestas 2021 internal slide deck - VESTAS Sustainability Report 2020 - VESTAS Circularity Roadmap - Vestas Wind Systems AS CDP Climate Change Questionnaire 2021 - KPI1 – internal planning document - Input for scope 3 climate plan – internal planning document - Selection of KPIs: Material Efficiency – internal planning document - Formal Q&A Process Documentation Discussions with VESTAS management	It is DNV's opinion that the SPTs outlined are aligned with and firmly positioned within VESTAS' broader sustainability strategy, as outlined in the ISSUER's annual report, sustainability report and circularity roadmap. All three KPIs and corresponding SPTs are directly related to topics that registered the highest materiality score in the 2020 Sustainability Report. DNV further opines that VESTAS has taken their SPTs a step further by integrating MHI-Vestas Offshore Wind into their data, incorporating new offshore design, manufacturing and service assets to their targets. The ISSUER states in their Sustainability at Vestas 2021 internal presentation that they are aiming to be carbon neutral by 2030 and producing zero-waste wind turbines by 2040. SPT 1 mirrors the overarching aim of becoming carbon neutral in own operations by 2030, while SPT 2 reflects the aim to extend this decarbonisation push to the supply chain. DNV further notes that SPT 3 will play a key role in driving VESTAS towards zero waste turbines by 2040. DNV further considers the SPTs ambitious, realistic and meaningful, a view informed by the following observations: **SPT 1:** The 100% reduction of Scope 1 and 2 GHG emissions from a 2019 baseline by 2030 without using carbon offsets will require the implementation of a range of measures over the coming decade and require the full phase-out of direct emissions. VESTAS has planned several examples of planned initiatives that will deliver this, including introducing renewable energy fuelled vehicles and vessels to their service fleet, electrifying moving equipment and construction activities, and switching to renewable energy heating in its factories. **SPT 2:** The 45% scope 3 GHG emission per MWh by 2030 from a 2019 baseline will require deep collaboration with the supply chain and the adoption of emerging clean technology. VESTAS has put in

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				place several requirements for scope 1, 2 and 3 reporting and target setting on strategic suppliers - including the requirement that suppliers to source 100% of their electricity consumption from renewable energy. This will feed into a supplier platform collating primary data from 2022, which will enable VESTAS to better track and influence its supply chain to support emission reductions from the mid-2020s through procurement incentives. Delivering on the SPT is also expected require the sourcing of EAF steel already in the early 2020s, and green steel in the late-2020s, and will lean on clean technology development and adoption. **SPT 3:** The reduction of non-recycled waste from VESTAS own operations to 0.2 tonnes per MW will be driven by a combination of design improvements, supply chain partnerships and specific local, regional, and global waste reduction targets for VESTAS facilities. VESTAS has highlighted several initiatives to be introduced to enable them to meet the SPT. This includes decreasing production waste, implementing specific landfilling reduction targets, optimising the blade design, and sourcing more efficient manufacturing kits. While this customisation may lead to more waste for the manufacturer of such kits, DNV notes that about 50 of VESTAS strategic suppliers are required to measure and set targets to reduce production waste.
2b	Target Setting - Meaningful	SPTs should represent a material improvement in the respective KPIs and be beyond a "Business as Usual" trajectory; where possible be compared to a benchmark or an external reference and be determined on a predefined timeline, set before (or concurrently with) the issuance of the bond.	Review of: - VESTAS Sustainability-Linked Bond Framework - Formal Q&A Process Documentation Discussions with VESTAS management	DNV opines that the SPTs outlined per KPI, in isolation and combined, represent a material improvement compared to a "Business as Usual" trajectory of the KPIs selected: • **SPT 1:** As outlined in 2a, in order to deliver on the SPT outlined, VESTAS will need to achieve material improvements that can facilitate the 100% reduction in scope 1&2 emissions, particularly considering the exclusion of carbon offsets as an option. • **SPT 2:** DNV opines that to meet SPT 2, VESTAS will require substantial progress from - and collaboration with - its

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				supply chain, as well as the adoption of nascent green technology, such as EAF steel and green steel. While performance under this KPI also could be supported by increasing wind turbine sizes and turbine lifetimes increasing the MWh per year, DNV is of the opinion that the listed improvement measures and related material improvements will be key components to enabling target achievement. DNV further notes that by improving the efficiency of wind turbines and scaling up the use of wind technology, VESTAS can amplify the positive environmental benefits of their products in the form of greater penetration of renewable energy in the global power generation mix. • **SPT 3:** DNV opines that the achievement of SPT 3 will be dependent on the implementation of several ambitious waste reducing measures – as outlined in 2a. Furthermore, the limited external comparisons and resource circularity benchmarks highlights the nascent stage of publicly announced circularity strategies in the industry, and further underscores the high level of ambition of the SPT trajectory for SPT 3 (also see 2c for benchmarks). DNV notes that VESTAS performance under this KPI depends on the level of subcontractors used, vis-à-vis own manufacturing. VESTAS strategy is not to outsource large parts of their core business and DNV notes that significant changes to this strategy will trigger a KPI baseline recalculation as outlined in the fallback mechanisms section of the Framework.
2c	Target Setting – benchmarks	The target setting exercise should be based on a combination of benchmarking approaches: 1. The issuer's own performance over time for which a minimum of 3 years, where feasible, of measurement track record on the selected KPI(s) is	Review of: - VESTAS Sustainability-Linked Bond Framework - Formal Q&A Process Documentation Discussions with VESTAS management	DNV confirms that the SPT target setting exercise has, to the extent possible, been based on an appropriate combination of benchmarking approaches: 1. DNV confirms that the framework provides a track-record of historic data for each KPI to the extent possible. This includes historic data for 2019, 2020 and 2021 for KPI 1 and KPI 2 – of which 2019 and 2020 represents a consolidated dataset of VESTAS and MHI Vestas prior to VESTAS' acquisition of the

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		recommended and when possible forward-looking guidance on the KPI 2. The SPTs relative positioning versus the issuer's peers where comparable or available, or versus industry or sector standards 3. Systematic reference to science-based scenarios, or absolute levels (e.g. carbon budgets) or official country/regional/international targets or to recognised Best-Available-Technologies or other proxies		latter in December 2020. For KPI 3, the first year of available historic data is 2021, while historic data for the onshore wind segment only is provided for 2019 and 2020 as a proxy track-record indicator. There is forward-looking guidance on all the KPIs leading up to 2030. 2. DNV notes that the SPT 1 and 2 have been validated by SBTi and thus constitute best practice targets within VESTAS' own industry. SPT 3 reflects that circularity is relatively new focus for targets in the industry. a. **SPT 1** is aligned with an emission reduction trajectory that limits global warming to 1.5°C. DNV notes that companies such as Siemens Gamesa have the ambition to reach 70% reduction in scope 1 and 2 emission by 2025 from 2017[4], and General Electric (owner of GE Renewable Energy) aims for carbon neutrality in 2030[5]. VESTAS ambition to achieve carbon neutrality without using carbon offsets makes the 2030 SPT target for KPI 1 notably ambitious. The use of carbon offsets has not been explicitly excluded by competitors in their public communication. b. **SPT 2** is aligned with limiting global warming to 2°C under SBTi. DNV further notes that there are no directly comparable scope 3 targets adopted by VESTAS competitors, with VESTAS being the only company with a validated scope 3 target under SBTi. VESTAS has resubmitted the adjusted baseline that incorporates MHI Vestas to SBTi. c. **For SPT 3**, DNV notes that there is a lack of comparable industry benchmarks available because of limited adoption of directly comparable material efficiency targets in the industry. That said, while not directly comparable, LM Wind Power (a part of GE Renewable Energy) adopted the aim to produce zero

[4] https://www.siemensgamesa.com/-/media/siemensgamesa/downloads/en/sustainability/environment/siemens-gamesa-ghg-report-fy21.pdf
[5] https://www.ge.com/news/reports/ge-commits-to-carbon-neutral-2030-goal

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				waste wind turbine blades by 2030[6]. LM Wind Power includes incineration with energy recovery as a viable route to meeting the target. VESTAS' decision to exclude incineration with energy recovery as a measure to deliver on the SPT 3 trajectory makes this notably ambitious. 3. DNV confirms that there is a systematic reference in the Framework to science-based scenarios. VESTAS' existing SBTi targets for scope 1 and 2 emissions (SPT 1) and scope 3 emissions (SPT 2) mirrors the 2030 SPTs adopted in the Framework. VESTAS has resubmitted the baselines for these two targets to SBTi. For SPT 3 on material efficiency, the lack of external benchmarks means VESTAS measures impact against own historical performance and BAU projections.
2d	Target setting – disclosures	Disclosures on target setting should make clear reference to: 1. The timelines of target achievement, the trigger event(s), and the frequency of SPTs 2. Where relevant, the verified baseline or reference point selected for improvement of KPIs as well as the rationale for that baseline or reference point to be used 3. Where relevant, in what situations recalculations or pro-forma adjustments of baselines will take place 4. Where possible and taking into account competition	Review of: - VESTAS Sustainability-Linked Bond Framework - KPI1 – internal planning document - Input for scope 3 climate plan – internal planning document - Selection of KPIs: Material Efficiency – internal planning document - Formal Q&A Process Documentation	DNV confirms that the relevant disclosures on target setting are appropriately referenced: 1. There is a clear reference made to SPT trajectory leading up to the 2030 SPTs being the timeline for the Framework. The specific year that will constitute a trigger event for a specific bond will be specified in the corresponding bond documentation. The Framework outlines that there will only be one trigger event per bond issued, which will be specified with relation to the timeframe of the security. 2. The reference point for the SPT 1 and SPT 2 will be a 2019 baseline, following the consolidation of Vestas onshore and offshore historic datasets. Defining a 2019 baseline for the first two SPTs ensures continued alignment with Vestas existing science-based targets under the SBTi. The reference point for the SPT 3 will be 2021 – as the result of only historic data being available for both the onshore and offshore business segments from 2021.

[6] https://www.offshorewind.biz/2021/11/23/lm-wind-power-targets-zero-waste-turbine-blades-by-2030/

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		and confidentiality considerations, how the issuers intend to reach such SPTs	Discussions with VESTAS management	3. The Framework clearly outlines what may constitute a significant change in VESTAS' structure. This may include acquisitions, mergers and divestitures. 4. DNV is of the opinion that the Framework contains sufficient information on how Vestas can meet the respective SPT trajectories for the three SPTs, as outlined in 2a. More specific details of such measures and the timing of their implementation have been provided to DNV in confidence. Furthermore, SPT 2 and SPT 3 are dependent on continuous data access improvement and emerging technologies, and DNV believes that the portfolio of measures planned by VESTAS can facilitate SPT target delivery.

3. Bond Characteristics

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Bond Character-istics – SPT Financial/ structural impact	The SLB will need to include a financial and/or structural impact involving trigger event(s) based on whether the KPI(s) reach the predefined SPT(s).	Review of: - VESTAS Sustainability-Linked Bond Framework - Formal Q&A Process Documentation Discussions with VESTAS management	DNV can confirm that any bond issued under the Framework will contain financial characteristics that will depend on VESTAS' performance under each KPI against the relevant reference year of the SPT trajectory in the corresponding security documentation. DNV deems this to be appropriate under the SLBP. Any bond issued under the Framework will only have one target observation date, which will be specified in the bond documentation. Failure to meet one or more of the SPTs outlined for the KPIs on the reference year will include a coupon step-up from the first day of the next interest period up until maturity. KPI 1 is weighted as 20% of the total of such a step-up and KPI 2 and KPI 3 weighted at 40% respectively. In DNV's view, this reflects the materiality of the KPIs, with scope 1 and 2 emissions representing a small share of Vestas overall GHG footprint in the value chain compared to scope 3 emissions. KPI 3, on the other hand, requires several ambitious measures (see 2a) and deals with a key environmental challenge that highlights its high materiality. DNV notes that the SPT trajectories for KPI 1 and KPI 3 show strong reductions in the near future, while for KPI 2 the reductions are non-linear, where more of the reductions are planned for the period after 2025. This means that if VESTAS issues bonds with a short duration, the target observation date will fall within a period where less reductions are required under one out of three KPIs. That said, DNV notes that for KPI 2 over this period, VESTAS will need to implement several key emission reductions enabling measures in the supply chain to deliver on the long-term SPT trajectory. These include requiring about 50 strategic suppliers to implement scope 1, 2 and 3 reporting and targets, as well as building a digital platform that collects primary emissions data from suppliers.

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3b	Bond Character-istics – Fallback mechanism	Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner should be explained. Issuers may also consider including, where needed, language in the bond documentation to take into consideration potential exceptional events	Review of: - VESTAS Sustainability-Linked Bond Framework - VESTAS Sustainability Report 2020 - Formal Q&A Process Documentation Discussions with VESTAS management	DNV concludes that the Framework contains appropriate provisions for fallback mechanisms, and that these are appropriately explained for cases when the SPTs cannot be calculated or observed in a satisfactory manner. For SPT 1 and 2 specifically, this will follow VESTAS policy for baseline adjustments for carbon emissions as outlined in the VESTAS sustainability report and the fallback mechanisms of the Framework. For KPI 3, any material shift in structure of the business will constitute an event that will require a recalculation of the baseline. Finally, the Framework provides examples of what might constitute a significant change in VESTAS' structure – including acquisitions of companies, divestitures, mergers, or technical changes such as an updated IT system - and that the SPT trajectory adjustment will be verified and approved by an independent reviewer. Such an adjustment shall present an equal or higher ambition compared to that of the SPT trajectory presently in the framework.

4. Reporting

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
4a	Reporting	Issuers of SLBs should publish, and keep readily available and easily accessible: 1. Up-to-date information on the performance of the selected KPI(s), including baselines where relevant 2. A verification assurance report relative to the SPT outlining the performance against the SPTs and the related impact, and timing of such impact, on the bond's financial and/or structural characteristics 3. Any information enabling investors to monitor the level of ambition of the SPTs This reporting should be published regularly, at least annually, and in any case for any date/period relevant for assessing the SPT performance leading to a potential adjustment of the SLB's financial and/or structural characteristics.	Review of: - VESTAS Sustainability-Linked Bond Framework - Formal Q&A Process Documentation Discussions with VESTAS management	DNV concludes that the Framework will ensure that the information required by the SLBP will be published in a timely manner and kept publicly available: 1. A Sustainability-Linked Bond Progress Report will be made available on the VESTAS website following the issuance of BONDS. The report will be called SLB progress report and will be made available on an annual basis, and no later than 120 days after year-end, and document the progress on the three KPIs, and whether SPT trajectories have been met or not as per the reference year. Information on calculation methodology and baselines will be provided where relevant. 2. The Sustainability-Linked Bond Progress Report will include an externally verified assurance progress tracking report. The report will contain the relevant information to assess whether Step Up Date will impact the financial characteristics of outstanding securities, as per the terms and conditions specified in the relevant bond documentation. 3. The SLB progress report will provide information on new or proposed regulations that have relevance to the SPTs. Further, the report will also inform on updates to VESTAS' own sustainability strategy and governance that may impact the SPTs. In combination, this will provide relevant insights on the level of ambition of the three SPTs over time.

5. Verification

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
5a	External Verification	Issuers should have its performance against each SPT for each KPI independently verified by a qualified external reviewer with relevant expertise, at least once a year and for each SPT trigger event.	Review of: - VESTAS Sustainability-Linked Bond Framework - Formal Q&A Process Documentation Discussions with VESTAS management	DNV confirms that VESTAS has committed in their Framework to obtain external and independent verification of its annual KPI performance relative to the SPTs and the SPT trajectory in connection with any trigger event as specified in specific BOND documentation.