

SECOND PARTY OPINION (SPO)

Sustainability Quality of the Issuer and Sustainability-Linked Bonds

Deutsche Telekom AG
12 July 2021

VERIFICATION PARAMETERS

Type(s) of instruments contemplated	Sustainability-Linked Bonds
Relevant standards	Sustainability-Linked Bond Principles, as administered by ICMA
Lifecycle	Pre-issuance verification
Validity	As long as the issuer's Sustainability-Linked Financing Framework and SPT benchmarks remain unchanged

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SCOPE OF WORK

Deutsche Telekom (“DT”) commissioned ISS ESG to assist with its Sustainability-Linked Bonds by assessing three core elements to determine the sustainability quality of the instruments:

1. The sustainability credibility of the KPIs selected and Sustainability Performance Targets (SPTs) calibrated – whether the KPIs selected are core, relevant and material to the issuer’s business model and sector and whether the associated targets are ambitious.
2. DT’s Sustainability-Linked Financing Framework (July 2021) and structural components of the transaction – benchmarked against the Sustainability-Linked Bond Principles (SLBP), as administered by the International Capital Market Association (ICMA).
3. Sustainability-Linked Bonds link to DT’s sustainability strategy – drawing on DT’s overall sustainability profile and related objectives.

ISS ESG SPO ASSESSMENT SUMMARY

SPO SECTION	EVALUATION SUMMARY ¹
<p>Part 1:</p> <p>Focus on KPI selection and SPT calibration</p>	<p>KPIs selection: Material to issuer’s business model and sustainability profile</p> <p>Sustainability Performance Targets² (SPTs) calibration:</p> <ul style="list-style-type: none"> • SPTs are ambitious against issuer’s past performance • SPTs are ambitious against issuer’s sectorial peer group • SPT 1 is ambitious against Paris Climate Goals and SPT 2 is considered as sufficiently ambitious by the Science Based Target initiative (SBTi) based on SBTi’s Scope 3 criteria³ <hr/> <p>The KPIs selected are core, relevant and material to DT’s business model and consistent with its sustainability strategy. They are appropriately measurable, quantifiable, externally verifiable and benchmarkable. They cover a material scope of the operations and activities of DT.</p> <p>The SPTs calibrated by DT are ambitious against the company’s past performance, and compared to Telecommunications sector practices in terms of defining a GHG emissions reduction target. DT is one of the 49 companies in its industry to have GHG emissions reduction targets (and one the 29 companies covering the 3 Scopes), out of 150 companies included in the sector⁴. SPT 1, related to Scopes 1 and 2 emissions, is one of the most of ambitious target set in the Telecommunications sector. Due to no information available, ISS ESG was not able to assess the SPT 2 level of ambition against DT’s peer group as the DT group is the only actor in the market to pursue such a target using a kgCO₂eq / customer metric. However, as DT is already part of the 20% of companies that have an SBTi approved Scope 3 emissions related target, ISS ESG considers SPT 2 as ambitious against peers. Both SPTs have been approved in 2019 by the SBTi. The SPT 1 goes beyond the SBTi target set in 2019 and equates to a more ambitious reduction of GHG emissions Scopes 1 and 2 than required by the SBTi. SPT 1 is consistent with reductions required to keep global warming to 1.5°C. According to the SBTi, SPT 2 is considered as sufficiently ambitious as it meets the 2% annual emissions reduction and the no growth in absolute emissions criteria applicable to Scope 3 emission targets. Due to a lack of reference point, no statement is possible relating to the alignment of SPT 2 with the Paris Climate Goals. The targets are set in a clear timeline, are benchmarkable and supported by a credible strategy and action plan.</p>

¹ ISS ESG’s evaluation is based on the engagement conducted from April to July 2021, on DT’s Sustainability-Linked Financing Framework (July 2021 version) and on the ISS ESG Corporate Rating applicable at the SPO delivery date (updated on March 2021).

² SPT 1 = At least 90% reduction of absolute Scopes 1 and 2 CO₂eq emissions out DT’s own effort in operations (compared to 2017) by 31 December 2025.

SPT 2 = At least 25 % reduction of Scope 3 CO₂eq emissions per customer versus 2017 baseline by 31 December 2030.

³ Due to a lack of reference point, no statement is possible relating to the alignment of SPT 2 with the Paris Climate Goals.

⁴ Analysis based on ISS ESG universe (data as of 05.07.21) and data available on the SBTi website (as of 05.07.21).

<p>Part 2:</p> <p>Alignment with the SLBP</p>	<p>Aligned with the ICMA Sustainability-Linked Bond Principles</p> <p>DT has defined a formal concept for its Sustainability-Linked Bonds regarding the selection of KPIs, calibration of Sustainability Performance Targets (SPTs), Sustainability-Linked Notes characteristics, reporting and verification. This concept is in line with the Sustainability-Linked Bond Principles (SLBP) administered by the ICMA.</p>
<p>Part 3:</p> <p>Issuer sustainability performance</p>	<p>Consistent with issuer's sustainability strategy</p> <p>Status: Prime, Rating: B, Decile Rank: 1</p> <p>DT is rated 3rd out of 150 companies within the Telecommunications sector as of 05.07.2021. This equates to a high relative performance, with a Decile Rank relative to industry group of 1, given that a decile rank of 1 indicates highest relative ESG performance out of 10. According to the ISS ESG rating published 02.03.2021, the company shows a High sustainability performance and has been given a rating of 'B', which classifies it as 'Prime' by the methodology of the ISS ESG Corporate Rating.</p>

ISS ESG SPO ASSESSMENT

PART 1: SUSTAINABILITY CREDIBILITY OF KPI AND SPT

1.1. KPI selection

KPIs selected by DT

FROM ISSUER'S FRAMEWORK

KPI 1: Absolute Scope 1 and Scope 2 Greenhouse Gas Emissions (in kt CO₂eq)

- **KPI 1:** Absolute Scope 1 and Scope 2 Greenhouse Gas Emissions (in kt CO₂eq).
- **SPT 1:** At least 90% reduction of absolute Scopes 1 and 2 CO₂eq emissions out of DT's own effort in operations (compared to 2017) by 31 December 2025.

Methodology for KPI measurement: DT calculates its CO₂eq emissions across the Group in line with the market-based method of the Greenhouse Gas (GHG) Protocol, and reports them together with its self-defined CO₂eq reduction goal, thereby complying with criterion 13 of the German Sustainability Code (Greenhouse gas emissions).

Baseline: 4030 ktCO₂eq.

Baseline year: In line with SBTi criteria, 2017 constitutes the baseline as the most recent year for which final figures were available when the targets were being set.

2025 goal: 403 ktCO₂eq or lower.

Scope: Covers absolute Scopes 1 and 2 greenhouse gas emissions of DT's fully consolidated activities. Scope 1 covers the GHG emissions from DT's own operations. Scope 2 covers indirect GHG emissions from consumption of purchased electricity and heat used in DT's own operations.

KPI 2: Scope 3 Greenhouse Gas emissions intensity (in kgCO₂eq / customer)

- **KPI 2:** Scope 3 Greenhouse Gas emissions intensity (in kgCO₂eq / customer).
- **SPT 2:** At least 25 % reduction of Scope 3 CO₂eq emissions per customer versus 2017 baseline by 31 December 2030 (an "SPT Target Date").

Methodology for KPI measurement: DT calculates its Scope 3 CO₂eq emissions across the Group in line with the market-based method of the Greenhouse Gas (GHG) Protocol, and reports them together with its self-defined CO₂ reduction goal, thereby complying with criterion 13 of the German Sustainability Code (Greenhouse gas emissions). For this KPI, the most material four categories of Scope 3 based on SBTi requirements were considered (covering >80% of total absolute Scope 3 emissions): Purchased goods and services, Capital goods, Use of sold products and downstream leased assets). The per customer figure includes mobile, fixed-line, broadband and TV customers (excl. wholesale).

Baseline: 51 kg CO₂eq / customer.

Baseline year: In line with SBTi criteria, 2017 constitutes the baseline as the most recent year for which final figures were available when the targets were being set.

2030 goal: 38 kgCO₂eq / customer.

Scope: Covers absolute Scope 3 greenhouse gas emissions of DT's fully consolidated activities. Scope 3 covers upstream and downstream elements of the value chain.

Rationale for KPI 2: Relative emission targets are still rare in the industry. However, for DT, this relative KPI is the most appropriate as it covers the challenge resulting from growing data use per customer and increasing numbers of connected devices used by each customer, while neutralizing the impact of future acquisitions or disposals. The SBTi considered DT Scope 3 target as sufficiently ambitious as it ensures no absolute growth in emissions over the target period and meets the requirement of 2% annual physical intensity improvement over the target period.

Rationale for KPI 1 and KPI 2

Both KPIs are:

- Relevant and core to DT's overall business because Scopes 1, 2 and 3 emissions are covered;
- Consistent with the results of the materiality analysis performed annually by DT since 2014;
- Part of DT's most recent climate targets (as of March 2021) which go beyond DT Group's climate targets validated by SBTi in 2019; with KPI 1 also impacting Board Members' compensation (30% of short-term incentive);
- Measurable and quantifiable on a consistent methodological basis.

Materiality and relevance

Climate protection is considered as a key ESG issue faced by the Telecommunications sector according to key ESG standards⁵ for reporting and ISS ESG assessment. While the sector plays an important role in GHG abatement, it is important to recognize that the sector contributes to climate change as well. Widespread adoption of ICT devices has led to a rise in their associated GHG emissions (from 2002 to 2011 emissions rose from 0.53 GtCO₂eq to 0.91 GtCO₂eq and were projected to rise to 1.27 GtCO₂eq by 2020)⁶. Indeed, companies of this sector are highly energy-intensive as namely in the (i) process of sharing data through their networks, (ii) storing, processing, and disseminating data and applications through their data centers and (iii) enabling the propagation of end-user devices (e.g. PC, tables, smartphones). Thus to mitigate climate change, the industry continues to work toward increasing the energy efficiency of its own devices to stem the rise in emissions as ICT proliferates.

ISS ESG finds that climate protection and the GHG emissions reduction KPIs selected by DT are:

- Relevant to DT's business as its industry is highly GHG-emitting and expected to offer climate change mitigation solutions (e.g. improvement of energy efficiency in networks).
- Core to DT's business as climate protection measures will impact key processes and operations (e.g. energy efficiency in networks, data centers and buildings).
- Material to DT from an ESG perspective as it is one of the key ESG issues faced by the Telecommunications sector and hence, as one of the industry leaders (e.g., presence in 50 countries, 242 million of mobile customers, 226,300 employees, c.101 billion euros in revenues as of Dec 31,2020), DT can have a material impact on the issue.

⁵ Key ESG Standards include SASB and TCFD, among others.

⁶ GeSI SMARTer 2020: The Role of ICT in Driving a Sustainable Future.

Consistency with overall company's sustainability strategy

DT is committed to the principles of the United Nations Global Compact, the German Sustainability Code, the UN Guiding Principles on Business and Human Rights and Germany's Code of Responsible Conduct for Business and to various low carbon initiatives such as the *Stiftung 2°* foundation, econsense as well as international collaborations like the Global e-Sustainability Initiative.

According to the issuer, the company's responsibility should be taken into account in all business decisions (e.g. in operational processes, in relationships with its employees, suppliers and customers). To fulfill this commitment, the company has developed a group Corporate Responsibility (CR) strategy that includes 3 fields of action:

- Enabling a sustainable lifestyle in a digital world.
- Connect the unconnected.
- Low carbon & Circular society.

The importance of the third field of action (Low-carbon & Circular society) is highlighted by the position of environmental topics in the upper right corner of the issuer materiality matrix and by the implementation of an integrated climate strategy⁷ including four aspects of climate protection: 'renewable energy', 'energy efficiency', 'value chain emissions' and 'enabling society'.

In the past, DT Board of Management set various climate-related goals. As early as in 1995, the company set a first one. A second target was set for 2020, aiming at a 20% reduction of CO₂-emissions (Scope 1 and 2) by 2020. Both targets were reached. Already in 2019, DT subsequently set climate goals that make a contribution to achieving the 1.5°C goal of the Paris Agreement.

ISS ESG finds that the KPIs selected by DT are consistent with the overall company's sustainability strategy.

Measurability

- **Material scope and perimeter:** The KPIs selected cover material operations and activities of DT. KPI 1 covers 100% of DT Scopes 1 and 2 emissions (Scopes 1 and 2 represent c.14% of DT's total emissions in 2020) while KPI 2 covers > 80% of DT Scope 3 emissions⁸. Combined, KPI 1 and KPI 2 capture 82% of the GHG emissions of DT as of 2020.



Source: Deutsche Telekom AG Sustainability-Linked Financing Framework

⁷ According to the issuer, the climate strategy applies Groupwide and is implemented on an interdisciplinary and decentralized basis at the level of the national companies i.e. around 40 business units in ca. 30 countries.

⁸ Scope 3 represents c.86% of DT's total emissions in 2018.

- **Quantifiable:** KPI 1 (Scopes 1 and 2 absolute GHG emissions) is measurable and quantifiable. In fact, it is widely disclosed and standardized in the market and uses market-based method of the Greenhouse Gas (GHG) Protocol. KPI 2 (Scope 3 GHG emissions intensity per customer) is also measurable and quantifiable, but not commonly reported by companies in the Telecommunications sector. In fact, Scope 3 CO₂eq emissions (the numerator) follow the GHG protocol while the number of mobile, fixed-line, broadband and TV customers, excluding wholesale (the denominator) is part of the auditing process but not covered by acknowledged reporting principles⁹ (e.g. in terms of how to define and count the number of clients that a Telecommunication company is serving).
- **Externally verifiable:** Both KPIs are externally verifiable as they refer to market standards for GHG emission calculation (GHG protocol). Past performance data, including performance data point for baseline year, has been verified by a third party.
- **Benchmarkable:** By referring to a commonly acknowledged GHG accounting protocol, the KPIs are comparable and benchmarkable. However, if KPI 1 is commonly used in the Telecommunications sector, KPI 2 is not. Benchmarking of the SPTs in relation with these KPIs has been analyzed in the subsequent section.

Opinion: *ISS ESG finds that the KPIs selected are core, relevant and material to DT's business model and consistent with its sustainability strategy. They are appropriately measurable, quantifiable and benchmarkable. Past performance data, including performance data point for baseline year, has been verified by a third party. It is worth mentioning that KPI 2 is not widely used by the company's peers. The KPIs cover a material scope of the operations and activities of DT.*

⁹ DT counts per subscription/contract, meaning if a customer has a mobile contract and a TV contract it values 2 "customers". The figures stem from the financial reporting.

1.2. Calibration of SPT

SPT set by DT

FROM ISSUER'S FRAMEWORK¹⁰

SPT 1

Sustainability Performance Target: At least 90% reduction of absolute Scopes 1 and 2 CO₂eq emissions out of DT's own effort in operations (compared to 2017*) by 31 December 2025.

Sustainability Performance Target Trigger: ≤ 403 ktCO₂eq.

Sustainability Performance Target Observation Date: December 31, 2025.

2017 Baseline Intensity: 4030 ktCO₂eq*.

*In line with SBTi criteria, 2017 constitutes the baseline as the most recent year for which final figures were available when the targets were being set.

Strategic 2030 Goal / External Validation: The SBTi validated DT's commitment to reduce absolute Scope 1&2 GHG emissions 90% by 2030 from a 2017 base-year as in line with a 1.5°C scenario. SPT 1 is stricter than the existing SBTi validated target because it advances the target by 5 years to 2025. SPT 1 sets goals for a material improvement in KPI 1.

Strategy to achieve SPT: DT is on track to reach their target of 100% renewable electricity as of YE2021, strongly reducing its Scope 2 emissions. Continuously keeping the 100% level for renewable electricity is based on a strong management commitment (a) amidst volatile prices for renewable electricity and thus a regular, yet uncertain future amount of spending and (b) while data traffic and business is growing, requiring investments in 5G tower and fibre connections points which will go into operations.

Against this background, each additional percent of savings against the 2017 baseline means the realization of a high ambition and strong effort in pushing their networks' energy efficiency while facing technological constraints. To achieve their climate goal, DT is focusing on all areas with especially high energy consumption, such as DT's networks and data centres.

- **Networks:** Migrating its network infrastructure to IP technology, which is not only more powerful, but also consumes less electricity than existing technologies.
- **Data Centers:** Driving energy efficiency and consolidation in its data centres.
- **Buildings:** DT is also increasing energy efficiency in its buildings by reducing vacancies, optimizing space, and continuous monitoring of all resources that require energy.

Macro-economic factors supporting attainment of target: Growing political support (including EU regulation) for renewable energy and phase-out of high-emission fossil fuels as electricity production sources, leading to lower-carbon country energy mixes in countries of operations. Other supporting macro-trends include continuously increasing efficient heating systems, as well as the broad roll-out and regulatory support for e-mobility.

Risks to attainment of target: Uncertain availability and prices of certificates for renewable energy.

¹⁰ This table is displayed by the issuer in its Sustainability-Linked Financing Framework and have been copied over in this report by ISS ESG for clarity.

SPT 2

Sustainability Performance Target : At least 25 % reduction of Scope 3 CO₂eq emissions per customer versus 2017 baseline by 31 December 2030.

Sustainability Performance Target Trigger: 38 kgCO₂eq / customer.

Sustainability Performance Target Observation Date: December 31, 2030.

2017 Baseline Intensity: 51 kgCO₂eq / customer*.

*In line with SBTi criteria, 2017 constitutes the baseline as the most recent year for which final figures were available when the targets were being set.

Strategic 2030 Goal / External Validation: The 2030 SPT covering Scope 3 emission was validated by SBTi in May 2019. SPT 2 sets goals for a material improvement in the KPIs.

Strategy to achieve SPT: While Scope 3 emissions are volatile and rely strongly on assumptions, DT is pushing strict measures on the supplier side and increasing efficiency of devices, leading to a reduction of emissions on the customer side. For reducing its upstream emissions, DT is working with their key suppliers to reduce carbon emissions throughout the value chain. DT creates transparency about emissions in the upstream value chain by reviewing CDP Supply Chain data and approaching suppliers regarding improvements in reporting and data quality. The issuer is actively collaborating on refining the data basis for its emissions calculation with primary data from tier 1 suppliers and want them to also report on their upstream value chain emissions. Based on these efforts DT is joining forces with suppliers on identifying measures and setting targets to reduce emissions in the value chain. With regards to its downstream value chain, emissions hotspots are its fixed net services, with Broadband and TV services in particular. Therefore, the issuer is working on improving the efficiency of its devices. Further, consumer education will play an increasingly important role in DT's efforts in the future.

Macro-economic factors supporting attainment of target: The reduction of value chain emissions will also be facilitated by growing political support (including EU regulation) for renewable energy and phase-out of high-emission fossil fuels as electricity production sources, leading to lower-carbon country energy mixes in countries of operations. Other supporting macro-trends include continuously increasing efficient heating systems, as well as the broad roll-out and regulatory support for e-mobility. In addition, increasing energy efficiency of devices and societal awareness will contribute to relative lower downstream emissions.

Risks to attainment of target: Uncertain availability and prices of certificates for renewable energy. In addition, dependence of procurement relations upon various political, regulatory and economic circumstances.

Baseline Recalculation Mechanism for SPT 1 and SPT 2

Recalculations of GHG emissions with respect to a base year: the levels of GHG emissions for Scopes 1 and 2 emissions and Scope 3 emissions during the base-year 2017 will be recalculated to reflect any significant changes in the DT Group structure (e.g. acquisitions, divestitures, mergers) or methodological changes. The threshold value for a significant change is a change that drives an increase or decrease in Scopes 1 and 2 emissions or Scope 3 emissions, in aggregate, of 5 percent or more.

Any recalculations of GHG emissions base year or targets must be stated in the annual KPI reporting.

Ambition

Against company's past performance

SPT 1: DT sets SPT 1 to reduce its absolute GHG emissions (Scopes 1 and 2) equal to or less than 4030 ktCO₂eq. This equates to an estimated reduction of 90% by 2025 compared to the 2017 baseline year (representing a -25% compound annual decrease rate). Achieving this target would represent a significant reduction of Scopes 1 and 2 GHG emissions relative to the baseline year. It is not the first time that the group set a target related to Scopes 1 and 2 emissions. In fact, in 2013, DT committed to a 20% reduction of CO₂eq-emissions (Scopes 1 and 2) by 2020 (as compared with 2008 – representing a -1.85% compound annual decrease rate). The Sustainability Performance Target set within this framework is far more ambitious. However, ISS ESG understands that SPT 1 could be reached before as the key pillar of DT's strategy to attain it (use 100% renewable energy for their entire electrical power consumption) should be achieved in 2021.

SPT 2: For the first time since its creation, the group sets a target to reduce its Scope 3 GHG emissions intensity. SPT 2 aims at reaching at least 25 % reduction of Scope 3 CO₂eq / customer versus 2017 baseline by 31 December 2030 (equal to or less than 38 kgCO₂eq / customer by December 2030). The Scope 3 GHG emission intensity target validated by the SBTi considers no absolute growth of Scope 3 GHG emissions. From 2017 to 2020, ISS observes that the company's Scope 3 GHG emissions intensity has been decreasing from 51 kgCO₂eq / customer to 48 kgCO₂eq / customer (representing a -2.0% compound annual decrease rate). A 25% reduction between 2017 and 2030 would represent a 2.2% compound annual decrease rate which is slightly more ambitious than the company's past performance.

In this context and compared to the baseline year, the SPTs set by DT are perceived by ISS ESG as ambitious against the company's past performance.

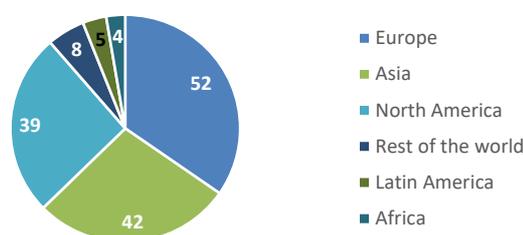
Against company's sectorial peers

ISS ESG conducted a benchmarking of the SPTs set by DT against the Telecommunications peer group of 150 listed companies derived from the ISS ESG Universe. Those companies are located in the markets displayed in Figure 1.

SPT 1

DT is one of 49 companies in its industry to have set a Scopes 1 and 2 GHG emission reduction target and one of 28 to have set an SBTi verified target (for Scopes 1 and 2 emissions), hence belonging to the top 20% tier of its sector in terms of existence of such target.

Figure 1: Telecommunications peer group per geographical market



Source: ISS ESG, as of 05.07.2021

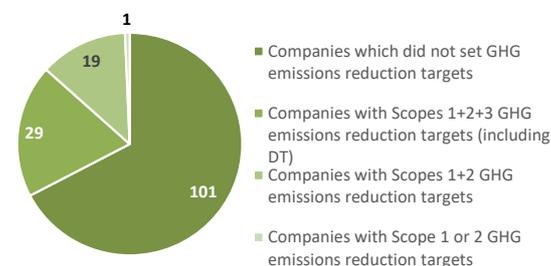
Among this top 20% tier, the SPT 1 set by DT is more ambitious than GHG emissions absolute reduction targets set by its peers in terms of average yearly reduction.

ISS ESG concludes that the SPT set by DT is one of the most ambitious compared to Telecommunications sector practices in terms of defining an absolute Scopes 1 and 2 GHG emissions reduction target.

SPT 2

DT is one of 29 companies in its industry to have set a Scope 3 GHG emission reduction target and one of 25 to have set an SBTi verified target related to this Scope, hence belonging to the top 20% tier of its sector in terms of existence of such target.

Figure 2: GHG emissions reduction targets set by peer group



Source: ISS ESG, as of 05.07.2021 and SBTi website as of 05.07.2021

Most of the peers among this top 20% tier have set an absolute Scope 3 GHG emissions reduction target while DT has set an intensity reduction target. Very few companies including DT and T-Mobile (DT’s subsidiary) have set a Scope 3 intensity reduction target. However, even those targets cannot be compared as they are not calculated in the same unit¹¹. Hence, ISS ESG was not able to run a detailed comparison of DT’s SPT 2 ambition level against its peers’ Scope 3 emissions targets.

However, as DT is part of the 25 companies out of 150 in its peer group (derived from the ISS ESG universe) that have an SBTi verified target related to Scope 3 emissions, ISS ESG concludes that the SPT set by DT is ambitious compared to Telecommunications sector practices in terms of defining a GHG emissions reduction target.

Against international targets

Paris agreement

In 2019, both targets have been assessed against the SBTi criteria and approved by the SBTi, a collaboration between Carbon Disclosure Project, the United Nations Global Compact, World Resources Institute and the World Wide Fund for Nature. The SBTi confirms that the targets covering greenhouse gas emissions from company operations (Scopes 1 and 2) are consistent with reductions required to keep warming to 1.5°C. The SPT 1 even goes beyond the SBTi target set in 2017 and equates to a more ambitious reduction of GHG emissions Scopes 1 and 2 than the one required by the SBTi.

In relation to Scope 3 emissions, the SBTi validated that DT’s target ensures no absolute growth in Scope 3 GHG emissions over the target period, and meets the 2% annual physical intensity improvements over the target period, therefore, the Scope 3 target is considered sufficiently ambitious by the SBTi based on its criteria for Scope 3 emissions targets.

ISS ESG finds that the SPTs are ambitious. According to SBTi, SPT 1 (that goes beyond the SBTi target set in 2017 and equates to a more ambitious reduction of GHG emissions Scopes 1 and 2 than required by the SBTi) is in line with the Paris agreement and a 1.5° Celsius warming scenario and SPT

¹¹ kgCO₂e / customers vs tCO₂e / total number homes passed vs tCO₂e / product unit purchased.

2 is sufficiently ambitious according to the SBTi Scope 3 criteria. Due to a lack of reference point, no statement is possible relating to the alignment of SPT 2 with the Paris Climate Goals.

UN Sustainable Development Goals

In addition, ISS ESG, using a proprietary methodology, assessed that the SPT achievement would have a positive contribution to the SDG 9 “Infrastructure and Industrialization” and SDG 13 “Climate Action”.

Measurability & comparability

- **Historical data:** DT reports annually on Scopes 1, 2 and 3 emissions in its corporate responsibility report, with verification by its statutory auditor. While historical data for KPI 1 and KPI 2 are available, significant M&A activity (acquisition of US telecommunication company Sprint which closed in 2020) has led to a restatement of the 2017 baseline figure. No restated figures were provided for 2018 and 2019. The 2017 baseline year has been verified by an external verifier.
- **Benchmarkable:** The KPIs, considered as core, relevant and material, are easily calculable by any company providing Telecommunications services. KPI 1 (Scopes 1 and 2 absolute GHG emissions) is measurable and quantifiable. In fact, it is widely disclosed and standardized in the market and uses the market-based method of the Greenhouse Gas (GHG) Protocol. KPI 2 (Scope 3 GHG emissions intensity per customer) is also measurable and quantifiable, but not commonly reported by companies in the Telecommunications sector. Scope 3 CO₂eq emissions (the numerator) follow the GHG protocol; while the number of mobile, fixed-line, broadband and TV customers, excluding wholesale (the denominator) is part of the auditing process but not covered by acknowledged reporting principles (e.g. in terms of how to define and count the number of clients that a Telecommunication company is serving).
- **Timeline:** DT defined a precise timeline related to the SPTs achievement, including the target observation date and the frequency of SPTs measurement. The trigger event and associated date are explicitly defined in DT’s 2021 Debt Issuance Programme, with the applicable figures and dates to be specified in each issuance’s final terms.

Supporting strategy and action plan

Strategy to achieve SPT 1: DT is on track to reach its target of 100% renewable electricity as of YE2021, strongly reducing its Scope 2 emissions. Keeping the 100% level for renewable electricity is based on a management commitment (a) amidst volatile prices for renewable electricity and thus a regular, yet uncertain future amount of spending and (b) while data traffic and business is growing, requiring investments in 5G tower and fibre connections points which will go into operations. To achieve its climate goal, DT is focusing on all areas with especially high energy consumption, such as its networks and data centers:

- **Networks:** DT is migrating its network infrastructure to IP technology, which is more powerful and consumes less electricity than existing technologies;
- **Data Centers:** DT drives energy efficiency and consolidation in its data centres;
- **Buildings:** DT is increasing energy efficiency in its buildings by reducing vacancies, optimizing space, and continuous monitoring of all resources that require energy.

Strategy to achieve SPT 2: While Scope 3 emissions are volatile and rely strongly on assumptions, DT is pushing measures on the supplier side and increasing efficiency of devices, leading to a reduction of emissions on the customer side. For reducing its upstream emissions, DT is working with its key suppliers to reduce carbon emissions throughout the value chain. It creates transparency about emissions in the upstream value chain by reviewing CDP Supply Chain data and approaching suppliers regarding improvements in reporting and data quality. DT is collaborating on refining the data basis for DT's emissions calculation with primary data from tier 1 suppliers and wants them to also report on their upstream value chain emissions. With regards to its downstream value chain, emissions hotspots are DT fixed net services, with Broadband and TV services in particular. Therefore, DT is working on improving the efficiency of its devices. Further, consumer education will play an increasingly role in its strategy.

Opinion: *ISS ESG finds that the SPTs calibrated by DT are ambitious against the company's past performance and compared to Telecommunications sector practices in terms of defining a GHG emissions reduction target. SPT 1, related to Scopes 1 and 2 emissions absolute reduction, is one of the most ambitious in the Telecommunications ISS ESG universe. For SPT 2, related to Scope 3 emissions intensity reduction, ISS ESG was not able to run a comparison of the target against DT's peers due to lack of reported targets from peer group. Indeed, as DT is the only company in the Telecommunications ISS ESG universe that has implemented a Scope 3 emissions intensity KPI using the kgCO₂e / customer metric, no information was available to run the analysis. However, DT belongs to the top 20% of its sector in terms of existence of a Scope 3 target. Both SPTs have been approved by the SBTi (SPT 1 even goes beyond the SBTi target set in 2017 and equates to a more ambitious reduction of GHG emissions Scopes 1 and 2 that required by the SBTi). However, while SPT 1, as a Scopes 1 and 2 target, is consistent with reductions required to keep global warming to 1.5°C, SPT 2, as a Scope 3 target, is considered sufficiently ambitious as it meets the SBTi Scope 3 criteria of 2% annual emissions intensity reduction over the target period and no growth in absolute emissions. However, due to a lack of reference point, no statement is possible relating to the alignment of SPT 2 with the Paris Climate Goals. The targets are set in a clear timeline, are benchmarkable and supported by a credible strategy and action plan.*

PART 2: SUSTAINABILITY-LINKED BOND PRINCIPLES

Rationale for Framework

FROM DT'S FRAMEWORK

Responsibility for a low-carbon society is one of the key action areas of DT's Corporate.

Responsibility strategy: DT is committed to reduce its own energy consumption and carbon footprint (Scope 1 and Scope 2) and to accompany its customers to reduce theirs (Scope 3). DT believes that sustainability-linked bonds financing its activities will highlight these sustainability objectives very effectively and provide fixed income investors with a further tool to assess its progress in contributing to climate change mitigation.

Opinion: ISS ESG considers the Rationale for Issuance description provided by DT as aligned with the SLBP. The issuer has created and committed to publicly disclose the framework in a comprehensive and credible manner.

2.1. Selection of KPIs

ISS ESG conducted a detailed analysis of the sustainability credibility of KPIs selection available in [section 1 of this report](#).

Opinion: ISS ESG considers the Selection of KPIs as per the description provided by DT as aligned with the SLBP. The KPIs are relevant, core and material to DT's overall business and of high strategic significance to DT's current and/or future operations (detailed analysis has been conducted in the [section 1 of this report](#)). The KPIs are quantifiable, externally verifiable and benchmarkable. They are well quantified and calculated on a consistent methodological basis. The baseline selected for improvement as well as the rationale for that baseline, is well defined. Performance data, including performance data point for baseline year, has been verified by a third party. The definition of applicable Scope and the perimeter for the KPIs are provided. However, ISS ESG understands that KPI 2 is not widely used by the company's peers.

2.2. Calibration of Sustainability Performance Targets (SPTs)

ISS ESG conducted a detailed analysis of the sustainability credibility of SPTs is available in [section 1 of this report](#).

Opinion: ISS ESG considers the Calibration of Sustainability Performance Targets (SPTs) description provided by DT as aligned with the SLBP. The SPT is ambitious against the company's past performance, compared to Telecommunications sector practices in terms of defining a GHG emissions reduction target. SPTs have both been approved by SBTi and, thus, considered as ambitious against international target. The SPT 1 goes beyond the SBTi target set in 2017 and equates to a more ambitious reduction of GHG emissions Scopes 1 and 2 than that required by the SBTi. Due to a lack of reference point, no statement is possible relating to the alignment of SPT 2 with the Paris Climate Goals. Key macroeconomic factors that may affect the achievement of the targets are disclosed in the framework. Calculation methodology and benchmark for the target achievement are clearly defined. The trigger event and associated date are explicitly defined in DT's 2021 Debt Issuance Programme, with the applicable figures and dates to be specified in each issuance's final terms.

2.3. Sustainability-Linked Bonds Characteristics

FROM ISSUER'S FRAMEWORK

Deutsche Telekom AG or Deutsche Telekom International Finance B.V. (each an "Issuer") may issue Sustainability-Linked Notes as described in this framework. The interest on the Sustainability-Linked Notes will be linked to reaching sustainability performance targets in relation to key performance indicators as described above which are core, relevant and material to Deutsche Telekom's business.

The Sustainability Performance Targets in relation to each KPI and the associated interest variation will be defined in the issuance documentation of the Sustainability-Linked Notes.

Opinion: ISS ESG considers the Sustainability-Linked Bonds Characteristics description provided by DT as aligned with the SLBP. In DT's 2021 Debt Issuance Programme, the issuer gives a detailed description of the potential variation of the financial characteristics of the securities. In its Framework, it clearly defines the KPIs and SPTs and the respective calculation methodologies. The framework includes a baseline recalculation mechanism, covering significant changes in group structure (incl. M&A) or methodology. However, no force majeure event is covered.

2.4. Reporting

FROM ISSUER'S FRAMEWORK

Deutsche Telekom will report annually information required to calculate or observe the performance of KPIs in relation to Sustainability Performance Targets in the Group's corporate responsibility report or in a similar report and will engage an external auditor to issue at least a limited assurance report regarding selected information contained in the KPI Report. The Limited Assurance Report will be available via Deutsche Telekom's website (www.telekom.com).

In addition, Deutsche Telekom will make public any information enabling investors to monitor the SPT(s) (e.g., any update in the DT's sustainability strategy or any recent announcements, strategic decisions, any methodology changes or updates, and means mobilized that might impact the achievement of the SPT(s)).

Opinion: ISS ESG considers the Reporting description provided by DT as aligned with the SLBP. This will be made publicly available annually and include valuable information, as described above.

2.5. Verification

FROM ISSUER'S FRAMEWORK

DT has appointed ISS Oekom to conduct an external review of its Framework and issue a Second Party Opinion to assess the environmental value-added and confirm the alignment of the Framework with the Sustainability-Linked Bond Principles. The Second Party Opinion will be available on DT's website.

An external auditor will be engaged to provide a limited assurance on the KPI reporting.

Opinion: ISS ESG considers the Verification description provided by DT as going beyond what is requested by the SLBP. Indeed, DT plans to have all annual values of the SPT published and verified.

PART 3: DT'S ESG PERFORMANCE AND STRATEGY

The ISS ESG Corporate Rating provides material and forward-looking environmental, social and governance (ESG) data and performance assessments. The overall analysis is graded on a twelve-point scale from A+ (the company shows excellent performance) to D- (the company shows poor performance or fails to demonstrate any commitment to appropriately address the topic). “Prime” status is granted to industry leaders who fulfill demanding performance expectations. Industry leaders are considered the top three companies in an industry from the ESG Corporate Rating universe at the time of generation of this report.

COMPANY	STATUS	RATING	DECILE RANK	TRANSPARENCY LEVEL
Deutsche Telekom AG	PRIME	B	1	VERY HIGH

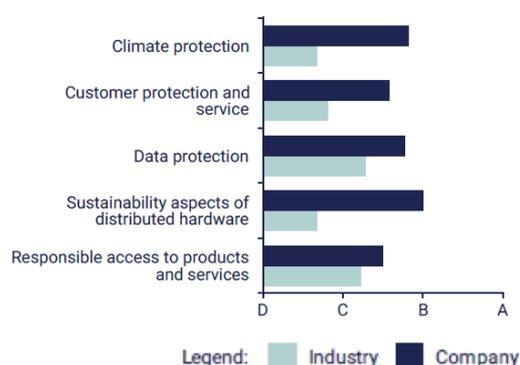
This means that the company sustainability performance is high, both compared against industry peers as well as in terms of the industry-specific requirements defined by ISS ESG.

ESG performance

As of 05.07.2021, this Rating places DT 3rd out of 150 companies rated by ISS ESG in the Telecommunications sector.

Key Challenges faced by companies in term of sustainability management in this sector are displayed in the chart on the right, as well as DT's performance against those key challenges in comparison to the average industry peers' performance.

Key Issue Performance



Sustainability Opportunities

Apart from traditional telecommunication products and services, Deutsche Telekom offers several products with the potential to contribute to solving global sustainability challenges. While the company's product portfolio among others include e-health solutions, which, e.g. enables medical care for inhabitants of rural areas, as well as cloud-based offers for business customers, smart water metering, and videoconferencing solutions. Yet, these products are assumed to account for only a minor share of Deutsche Telekom's total revenue share.

Sustainability Risks

Deutsche Telekom ensures information security in its own operations through certified management systems but also has implemented respective measures in regard to outsourced data processing. Additionally, its comprehensive data protection policy ensures that personal data of customers is also handled responsibly. The company has implemented a variety of measures to ensure that disadvantaged groups have access to telecommunication products and services, such as establishing

a hotline serving hearing impaired customers and offering devices for the elderly as well as special tariffs for different age groups and low-income households. Yet, detailed information is mostly available for the German market only. Customer protection is further supported by guidelines on responsible marketing and measures protecting minors from inappropriate content. Concerning environmental risks that mainly relate to climate change and the energy consumption of networks and data centers, Deutsche Telekom has strategic approaches for improving energy efficiency including research and development, projections and targets and the implementation of measures. As the company does not produce most devices sold in relation to its telecommunication services, risks are located further down the supply chain. Deutsche Telekom addresses these through committing to conduct due diligence in its raw materials supply chain and has implemented different processes allowing consumers to recycle obsolete devices. Further, it established binding supplier standards and guidelines concerning environmental features of telecommunication products. It has joined forces with other telecommunication companies in the Joint Audit Cooperation to ensure standards are adhered to by suppliers, for example through sharing audit results. The group has implemented large-scale downsizing of its staff over the last years but has made considerable efforts to avoid compulsory redundancies, assist employees affected by them and ensure responsible redundancy procedures.

Governance opinion

While the chairman of the board, Mr. Ulrich Lehner, is not considered independent the majority of board members are independent (as at February 05, 2021). However, audit and nomination board committees consist of few independent members only, and the remuneration committee does not comprise any independent members (as at February 05, 2021). Deutsche Telekom discloses its remuneration policy for executives, including longterm incentive components, which could incentivize sustainable value creation. There is no evidence of a board committee in charge of sustainability oversight, yet sustainability performance objectives are to some extent integrated into the variable remuneration of members of the executive management team. Deutsche Telekom's code of ethics and further compliance policies cover issues such as conflicts of interest, corruption and bribery, insider dealings, facilitation payments and gifts and entertainment in detail. Compliance is supported through, among other things, trainings, risk assessments, audits and as well as confidential reporting channels and a policy on whistleblower protection.

Sustainability impact of products and services portfolio

Using a proprietary methodology, ISS ESG assessed the contribution of DT current products and services portfolio to the Sustainable Development Goals defined by the United Nations (UN SDGs). This analysis is limited to evaluation of final product characteristics and does not include practices along DT's production process.

PRODUCT/SERVICES PORTFOLIO	ASSOCIATED PERCENTAGE OF 2019 REVENUE	DIRECTION OF IMPACT	UN SDGS
B2C telephony and internet services	40%	CONTRIBUTION	 
Cloud hosting services, videoconferencing solutions	5%	CONTRIBUTION	 
Others	N/A	NO NET IMPACT	N/A

Breaches of international norms and ESG controversies

The company is facing one severe controversy related to labour rights through its subsidiary T-Mobile US, INC (T-Mobile). T-Mobile, 43.6% owned by Deutsche Telekom AG, which has voting control over approximately 52.5% of T-Mobile’s outstanding equity), has resolved the findings by the United States (U.S.) National Labor Relations Board (NLRB) that it has infringed upon its employees’ union rights. In communication with ISS ESG in May 2020, the company confirmed that it is complying with a NLRB order issued in April 2020 in relation to a 2016 complaint concerning interrogation of employees about their union activities and coercion of union supporters. The company is not facing unaddressed NLRB complaints concerning union rights, however the Communication Workers of America (CWA) union maintains that the internal T-Voice program, used by employees to highlight customer “pain points”, undermines workers’ efforts to “improve working conditions”, despite the company having amended the program to resolve concerns that it could be used to raise employees’ concerns regarding their employment terms and despite the conclusion of the NLRB that the policy is lawful. In continuous communication with ISS ESG, T-Mobile and DT have repeatedly stated their commitment to respect union rights in accordance with national law. In communication with investors in September 2020, facilitated by ISS ESG, T-Mobile announced that it is considering publishing a commitment to freedom of association and collective bargaining consistent with US law, a position markedly different from the company’s previous refusal to establish such commitment. While addressing the NLRB requirements is a significant step in resolving the controversy, ISS ESG notes the outstanding stakeholder concerns and remains vigilant of the efficacy of the measures initiated by the company.

Issuer's commitment to address climate change

ISS ESG mapped the KPIs selected by the issuer for its Sustainability-Linked Bonds with the sustainability objectives defined by the issuer, and with the key ESG industry challenges as defined in the ISS ESG Corporate Rating methodology for the Telecommunications sector. Key ESG industry challenges are key issues that are highly relevant for a respective industry to tackle when it comes to sustainability, e.g. climate change and energy efficiency in the buildings sector. From this mapping, ISS ESG derived a level of contribution to the strategy of each KPIs selected.

KPI SELECTED	SUSTAINABILITY OBJECTIVES FOR THE ISSUER	KEY ESG INDUSTRY CHALLENGES	CONTRIBUTION
Scopes 1 and 2 absolute GHG emissions (ktCO₂eq)	✓	✓	Contribution to a material objective
Scope 3 GHG emissions intensity (kgCO₂eq / customer)	✓	✓	Contribution to a material objective

Opinion: *ISS ESG finds that the KPIs are consistent with the issuer's sustainability strategy and material ESG topics for the issuer's industry.*

DISCLAIMER

1. Validity of the SPO: For DT's Sustainability-Linked Bonds issuances as long as the Sustainability-Linked Financing Framework (July 2021 version), SPTs benchmarks and structural securities characteristics described in this document do not change.
2. ISS ESG uses a scientifically based rating concept to analyse and evaluate the environmental and social performance of companies and countries. In doing so, we adhere to the highest quality standards which are customary in responsibility research worldwide. In addition, we create a Second Party Opinion (SPO) on bonds based on data from DT.
3. We would, however, point out that we do not warrant that the information presented in this SPO is complete, accurate or up to date. Any liability on the part of ISS ESG in connection with the use of these SPO, the information provided in them and the use thereof shall be excluded. In particular, we point out that the verification of the compliance with the selection criteria is based solely on random samples and documents submitted by DT.
4. All statements of opinion and value judgements given by us do not in any way constitute purchase or investment recommendations. In particular, the SPO is no assessment of the economic profitability and credit worthiness of a bond but refers exclusively to the social and environmental criteria mentioned above.
5. We would point out that this SPO, in particular the images, text and graphics contained therein, and the layout and company logo of ISS ESG and ISS-ESG are protected under copyright and trademark law. Any use thereof shall require the express prior written consent of ISS. Use shall be deemed to refer in particular to the copying or duplication of the SPO wholly or in part, the distribution of the SPO, either free of charge or against payment, or the exploitation of this SPO in any other conceivable manner.

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ANNEX 1: ISS ESG Corporate Rating

The following pages contain extracts from DT's 2021 ISS ESG Corporate Rating.

ESG Corporate Rating



Deutsche Telekom AG



Company Information

Country
Germany

ISIN
DE0005557508

Industry
Telecommunications

Key Results

Rating
B

Decile Rank
1

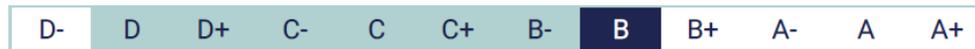
Transparency Level
Very High

Status
Prime

Performance score
65.06

Prime Threshold
C+

Absolute Rating

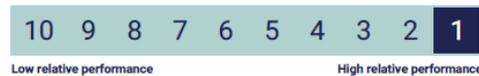


The assessment of a company's sustainability performance is based on approximately 100 criteria, selected specifically for each industry. A company's failure to disclose, or lack of transparency, regarding these matters will impact a company's rating negatively

Transparency Level



Decile Rank

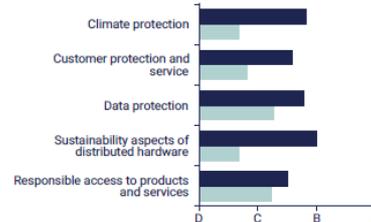


Industry Leaders

Company name (in alphabetical order)	Country	Grade
BT Group Plc	GB	B
Deutsche Telekom AG	DE	B
Magyar Telekom Telecomm...	HU	B

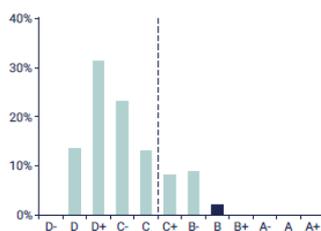
Legend: ■ Industry ■ Company --- Prime

Key Issue Performance

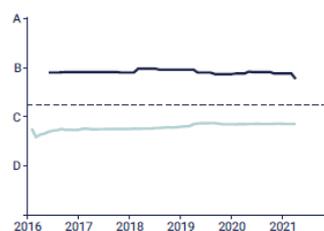


Distribution of Ratings

147 companies in the industry



Rating History



Deutsche Telekom AG

Methodology - Overview

The ESG Corporate Rating methodology was originally developed by Institutional Shareholder Services Germany (formerly oekom research) and has been consistently updated for more than 25 years.

ESG Corporate Rating - The ESG Corporate Rating universe, which is currently expanding from more than 8,000 corporate issuers to a targeted 10,000 issuers in 2020, covers important national and international indices as well as additional companies from sectors with direct links to sustainability and the most important bond issuers that are not publicly listed companies.

The assessment of a company's social & governance and environmental performance is based on approximately 100 environmental, social and governance indicators per sector, selected from a pool of 800+ proprietary indicators. All indicators are evaluated independently based on clearly defined performance expectations and the results are aggregated, taking into account each indicator's and each topic's materiality-oriented weight, to yield an overall score (rating). If no relevant or up-to-date company information with regard to a certain indicator is available, and no assumptions can be made based on predefined standards and expertise, e.g. known and already classified country standards, the indicator is assessed with a D-

In order to obtain a comprehensive and balanced picture of each company, our analysts assess relevant information reported or directly provided by the company as well as information from reputable independent sources. In addition, our analysts actively seek a dialogue with the assessed companies during the rating process and companies are regularly given the opportunity to comment on the results and provide additional information.

Analyst Opinion - Qualitative summary and explanation of the central rating results in three dimensions:

- (1) Opportunities - assessment of the quality and the current and future share of sales of a company's products and services, which positively or negatively contribute to the management of principal sustainability challenges.
- (2) Risks - summary assessment of how proactively and successfully the company addresses specific sustainability challenges found in its business activity and value chain, thus reducing its individual risks, in particular regarding its sector's key issues.
- (3) Governance - overview of the company's governance structures and measures as well as of the quality and efficacy of policies regarding its ethical business conduct.

Norm-Based Research - Severity Indicator - The assessment of companies' sustainability performance in the ESG Corporate Rating is informed by a systematic and comprehensive evaluation of companies' ability to prevent and mitigate ESG controversies. ISS ESG conducts research and analysis on corporate involvement in verified or alleged failures to respect recognized standards for responsible business conduct through Norm-Based Research.

Norm-Based Research is based on authoritative standards for responsible business conduct such as the UN Global Compact, the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles for Business and Human Rights and the Sustainable Development Goals.

As a stress-test of corporate disclosure, Norm-Based Research assesses the following:

- Companies' ability to address grievances and remediate negative impacts
- Degree of verification of allegations and claims
- Severity of impact on people and the environment, and systematic or systemic nature of malpractices

Severity of impact is categorized as Potential, Moderate, Severe, Very severe. This informs the ESG Corporate Rating.

Decile Rank - The Decile Rank indicates in which decile (tenth part of total) the individual Corporate Rating ranks within its industry from 1 (best – company's rating is in the first decile within its industry) to 10 (lowest – company's rating is in the tenth decile within its industry). The Decile Rank is determined based on the underlying numerical score of the rating. If the total number of companies within an industry cannot be evenly divided by ten, the surplus company ratings are distributed from the top (1 decile) to the bottom. If there are Corporate Ratings with identical absolute scores that span a division in decile ranks, all ratings with an equal decile score are classified in the higher decile, resulting in a smaller number of Corporate Ratings in the decile below.

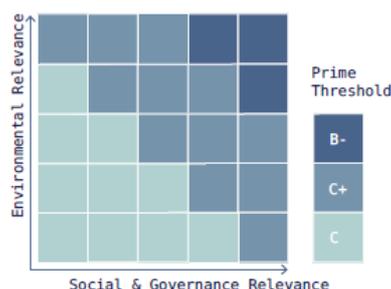
Distribution of Ratings - Overview of the distribution of the ratings of all companies from the respective industry that are included in the ESG Corporate Rating universe (company portrayed in this report: dark blue).

Deutsche Telekom AG

Methodology - Overview

Industry Classification - The social and environmental impacts of industries differ. Therefore, based on its relevance, each industry analyzed is classified in a Sustainability Matrix.

Depending on this classification, the two dimensions of the ESG Corporate Rating, the Social Rating and the Environmental Rating, are weighted and the sector-specific minimum requirements for the ISS ESG Prime Status (Prime threshold) are defined (absolute best-in-class approach).



Industry Leaders - List (in alphabetical order) of the top three companies in an industry from the ESG Corporate Rating universe at the time of generation of this report.

Key Issue Performance - Overview of the company's performance with regard to the key social and environmental issues in the industry, compared to the industry average.

Performance Score - The ESG Performance Score allows for cross-industry comparisons using a standardized best-in-class threshold that is valid across all industries. It is the numerical representation of the alphabetic ratings (D- to A+) on a scale of 0 to 100 with 50 representing the prime threshold. All companies with values greater than 50 are Prime, while companies with values less than 50 are Not Prime. As a result, intervals are of varying size depending on the original industry-specific prime thresholds.

Rating History - Development of the company's rating over time and comparison to the average rating in the industry.

Rating Scale - Companies are rated on a twelve-point scale from A+ to D-:

A+: the company shows excellent performance.

D-: the company shows poor performance (or fails to demonstrate any commitment to appropriately address the topic).

Overview of the range of scores achieved in the industry (light blue) and indication of the grade of the company evaluated in this report (dark blue).

Sources of Information - A selection of sources used for this report is illustrated in the annex.

Status & Prime Threshold - Companies are categorized as Prime if they achieve/exceed the sustainability performance requirements (Prime threshold) defined by ISS ESG for a specific industry (absolute best-in-class approach) in the ESG Corporate Rating. Prime companies are sustainability leaders in their industry and are better positioned to cope with material ESG challenges and risks, as well as to seize opportunities, than their Not Prime peers. The financial materiality of the Prime Status has been confirmed by performance studies, showing a continuous outperformance of the Prime portfolio when compared to conventional indices over more than 14 years.

Transparency Level - The Transparency Level indicates the company's materiality-adjusted disclosure level regarding the environmental and social performance indicators defined in the ESG Corporate Rating. It takes into consideration whether the company has disclosed relevant information regarding a specific indicator, either in its public ESG disclosures or as part of the rating feedback process, as well as the indicator's materiality reflected in its absolute weight in the rating. The calculated percentage is classified in five transparency levels following the scale below.

0% - < 20%: very low

20% - < 40%: low

40% - < 60%: medium

60% - < 80%: high

80% - 100%: very high

For example, if a company discloses information for indicators with a cumulated absolute weight in the rating of 23 percent, then its Transparency Level is "low". A company's failure to disclose, or lack of transparency, will impact a company's ESG performance rating negatively.

ANNEX 2: Methodology

ISS ESG Corporate Rating

The ESG Corporate Rating universe, which is currently expanding from more than 8,000 corporate issuers to a targeted 10,000 issuers in 2020, covers important national and international indices as well as additional companies from sectors with direct links to sustainability and the most important bond issuers that are not publicly listed companies.

The assessment of a company's social & governance and environmental performance is based on approximately 100 environmental, social and governance indicators per sector, selected from a pool of 800+ proprietary indicators. All indicators are evaluated independently based on clearly defined performance expectations and the results are aggregated, taking into account each indicator's and each topic's materiality-oriented weight, to yield an overall score (rating). If no relevant or up-to-date company information with regard to a certain indicator is available, and no assumptions can be made based on predefined standards and expertise, e.g. known and already classified country standards, the indicator is assessed with a D-.

In order to obtain a comprehensive and balanced picture of each company, our analysts assess relevant information reported or directly provided by the company as well as information from reputable independent sources. In addition, our analysts actively seek a dialogue with the assessed companies during the rating process and companies are regularly given the opportunity to comment on the results and provide additional information.

Alignment of the concept set for transactions against the Sustainability-Linked Bond Principles, as administered by ICMA

ISS ESG reviewed the Sustainability-Linked Financing Framework of DT, as well as the concept and processes for issuance against the Sustainability-Linked Bond Principles administered by the ICMA. Those principles are voluntary process guidelines that outline best practices for financial instruments to incorporate forward-looking ESG outcomes and promote integrity in the development of the Sustainability-Linked Bond market by clarifying the approach for issuance. ISS ESG reviewed the alignment of the concept of the DT's issuance with mandatory and necessary requirements as per the Appendix II - SLB Disclosure Data Checklist of those principles, and with encouraged practices as suggested by the core content of the Principles.

Analysis of the KPI selection and associated SPT

In line with the voluntary guidance provided by the Sustainability-Linked Bond Principles, ISS ESG conducted an in-depth analysis of the sustainability credibility of the KPI selected and associated SPT. ISS ESG analysed if the KPI selected is core, relevant and material to DT's business model and consistent with its sustainability strategy thanks to its long-standing expertise in evaluating corporate sustainability performance and strategy. ISS ESG also reviewed if the KPI is appropriately measurable by referring to key GHG reporting protocols and against acknowledged benchmarks. ISS ESG analysed the ambition of the SPTs against DT's own past performance (according to DT's reported data), against DT's Telecommunications peers (as per ISS ESG Peer Universe and data), and against international benchmarks such as the Paris agreement (based on data from the SBTi) and the UN SDGs (according the ISS ESG proprietary methodology). Finally, ISS ESG evaluated the measurability & comparability of the SPT, and the supporting strategy and action plan of DT.

ANNEX 3: Quality management processes

SCOPE

DT commissioned ISS ESG to compile a Sustainability-Linked SPO. The Second Party Opinion process includes verifying whether the Sustainability-Linked Financing Framework aligns with the SLBP and to assess the sustainability credentials of its Framework, as well as DT's sustainability strategy.

CRITERIA

Relevant Standards for this Second Party Opinion

- ICMA Sustainability-Linked Bond Principles

ISSUER'S RESPONSIBILITY

DT's responsibility was to provide information and documentation on:

- Framework
- Rationale and supporting calculations and methodologies for KPI selection and SPT setting
- Documentation of ESG strategy, policies and measures implemented by DT

ISS ESG'S VERIFICATION PROCESS

ISS ESG is one of the world's leading independent environmental, social and governance (ESG) research, analysis and rating houses. The company has been actively involved in the sustainable capital markets for over 25 years. Since 2014, ISS ESG has built up a reputation as a highly-reputed thought leader in the green and social bond market and has become one of the first CBI approved verifiers.

ISS ESG has conducted this independent Second Party Opinion of the Sustainability-Linked Bond to be issued by DT based on ISS ESG methodology and in line with the ICMA SLBP.

The engagement with DT took place from April to July 2021.

ISS ESG'S BUSINESS PRACTICES

ISS has conducted this verification in strict compliance with the ISS Code of Ethics, which lays out detailed requirements in integrity, transparency, professional competence and due care, professional behaviour and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.

About ISS ESG SPO

ISS ESG is one of the world's leading rating agencies in the field of sustainable investment. The agency analyses companies and countries regarding their environmental and social performance.

As part of our Sustainable (Green & Social) Bond Services, we provide support for companies and institutions issuing sustainable bonds, advise them on the selection of categories of projects to be financed and help them to define ambitious criteria.

We assess alignment with external principles (e.g. the ICMA Green / Social Bond Principles), analyse the sustainability quality of the assets and review the sustainability performance of DT themselves. Following these three steps, we draw up an independent SPO so that investors are as well informed as possible about the quality of the bond / loan from a sustainability perspective.

Learn more: <https://www.isscorporatesolutions.com/solutions/esg-solutions/green-bond-services/>

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