

DEUTSCHE TELEKOM ENVIRONMENTAL GUIDELINE CONTENT

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1. General commitment

- Deutsche Telekom (DT) is committed to taking a leading role in environmental protection in its own existing and new operations. In recognition of the needs and aspirations of present and future generations DT will consider all relevant aspects in the own operations but also in the relevant upstream and downstream value chain.

2. Public Policy

- DT recognizes the importance of effective public policies for achieving global sustainability. In particular, DT supports ambitious absolute reduction targets for global GHG emissions and the achievement of the targets from the international Paris Agreement from 2015.

3. Precautionary Principle

- DT complies with the legal requirements in all geographies it operates in. Beyond legal requirements, Deutsche Telekom employs a precautionary principle in existing and new ventures. We intend to prevent or alternatively minimize negative environmental impacts related to existing and new projects, products and services. Environmental Risk Assessments are an integral part of our due-diligence processes for mergers and acquisitions. We actively encourage and support external partners, such as suppliers, licensees, joint venture and outsourcing partners to apply the precautionary principle.

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4. Supplier Standards

- DT takes responsibility for its own operations and its supply chain. Suppliers to DT are bound by a Supplier Code of Conduct and relevant contract clauses which are part of DT supplier selection, contracts and on-going evaluation. By this code

<https://www.telekom.com/en/corporate-responsibility/news-corporate-responsibility/supplier-code-of-conduct-498834>

- Suppliers of DT are bound by contract to comply with DT minimum sustainability requirements. DT regularly reviews and enhances its requirements to products, services and suppliers.

5. Management Systems & Audits

- For the management of its environmental impacts Deutsche Telekom has implemented a group wide Environmental Management System which is part of the integrated group wide QHSE (Quality-, Health & Safety and Environment) Management System. The system covers all relevant DT companies and is regularly certified by external auditors. Systems and certificates currently implemented independently in DT companies are integrated into the corporate system over time. DT continuously improves the environmental management system to enhance environmental performance..

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6. Climate Change & Energy

- Climate change is a central action area of DT Corporate CR strategy which is part of group strategy. The Integrated Climate Change Strategy of Deutsche Telekom consists of four pillars covers the following aspects:
 - (1) Management and reduction of DT's own scope 1 & 2 carbon emissions (in particular related to telecommunications networks and data center operations) as well as the upstream and downstream scope 3 emissions, including distribution and logistics.
 - (2) Increase of the share of renewable energies in DT continuously.
 - (3) Increase of energy efficiency measured within the KPIs electricity consumption per transported unit of data volume and carbon emissions per transported unit of data volume.
 - (4) Measure and monitor the effect of our products and services and increase the number of products and services with environmental benefits by improving the enablement factor (enabled carbon reductions for our customers related to own overall carbon emissions, Scope 1 – 3)
- This strategy is subject to a regular review and update process to incorporate recent company and market developments.
- DT also supports different international recognized standards to improve the energy efficiency of its products and services as e.g.
 - the EU Broadband Code of Conduct (<https://ec.europa.eu/jrc/en/publication/eu-code-conduct-energy-consumption-broadband-equipment-version-6>) or
 - the EU Datacenter Code of Conduct (<https://ec.europa.eu/jrc/en/energy-efficiency/code-conduct/datacentres>).

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7.

Hazardous Substances, other Pollution and Health

- DT drives in close cooperation with the first their suppliers the monitoring and avoidance of (potentially) hazardous substances in the supply chain. This includes all substances on the REACH candidate list, the RoHS Directive and all substances that are considered hazardous according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
- The long-term objective is to avoid several potentially problematic substances that are currently not regulated. Therefore Deutsche Telekom requires a ban of these substances in those devices procured by DT. DT is implementing this ban in close cooperation with key device suppliers.
- DT cooperates with the Joint Research Center of the European Union (JRC) on the development and application of the electronic broadband code for equipment.

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8.

Natural Resources and Waste Management

- DT supports the ambition of the European Union to increase resource efficiency. For this purpose, DT established a group wide Waste Management Framework, including a commitment to avoid waste as far as possible by promoting the reuse of equipment and material recycling of raw materials:

<https://www.telekom.com/en/corporate-responsibility/climate-and-environment/is-01-climate-and-environment-context/circular-economy-355316>

- DT further supports the transformation to a circular economy by taking business opportunities in dematerialization (e.g. by e-media, software as a service) as well as by supporting a sharing economy (e.g. car sharing).
- In addition several product related specifications are used within the supplier selection process to address a number of environmental issues including the constant reduction of energy consumption and emissions (e.g. recycling paper, toner, printer...)

- DT also is leading in efforts for the recollection of used mobile phones, e.g.:

<https://www.handysammelcenter.de>

and promotes the repair of mobile phones to extend product life times:

<https://www.reparando.de>

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9. Infrastructure Extension and Maintenance

- DT products and services depend on the availability and extension of high-performance infrastructure and technology. New infrastructure is put in place with a view of minimizing life-time energy consumption and environmental impacts. Regular maintenance ensures efficient operation and long life-times .

10. Electromagnetic Radiation

- DT recognizes that some customers and stakeholders are concerned about possible adverse effects of electromagnetic fields.
- DT closely monitors scientific evidence and provides detailed information on the Group website regarding the latest technology and scientific risk assessments published by expert committees and organizations.
- The respective policy of DT:
<https://www.telekom.com/en/corporate-responsibility/climate-and-environment/is-01-climate-and-environment-context/mobile-communications-and-health-353630>

11. Other Environmental Issues

- DT recognizes the importance of other environmental issues such as water consumption or biodiversity. Although known impact is limited, Deutsche Telekom works to reduce such impacts as much as reasonably possible. Through ICT solutions DT strives to support water consumption transparency, water management systems as well as tracking and protecting of endangered species.

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12. Regular Progress Report

- Deutsche Telekom reports progress in environmental issues according to defined KPIs on a regularly basis in its Group CR Report:
<https://www.cr-report.telekom.com/site18>
- Deutsche Telekom also reports status and progress in environmental issues in its annual report and in the Global Compact Progress Report.

13. Scope, review and stakeholder involvement

- This policy document applies to all fully consolidated Deutsche Telekom Group companies and is reviewed annually and updated when any of the following conditions are met:
 - Changes in regulatory environment
 - Changes in important references/underlying standards
 - New knowledge on existing and not sufficiently addressed environmental aspects
 - Changes in stakeholder expectations (e.g. investors, customers, employees), which are captured through stakeholder communication and stakeholder dialogues in various formats. Also, DT gathers stakeholder feedback through a permanent stakeholder online survey:
<http://www.cr-report.telekom.com/stakeholder-umfrage/index.php?p=start>
- More detailed local regulations, if available, shall prevail, as long as they are not in conflict with the principles set in this Environmental Guideline.