C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Uniper is an international energy company, with approximately 13,000 employees and operations in more than 40 countries.

Corporate portfolio comprises power generation, commodity supply and trading, gas storage and infrastructure, sales and service provision. Since September 2016, Uniper has been listed on the stock exchange and represented in the MDAX and MSCI-Germany.

With an experience of more than 100 years, Uniper's main activities concentrate on gas fired power plants, coal fired power plants, nuclear power plants, hydro power plants, regasification, gas storage, gas infrastructure, energy sales (large and small customers) and trading. Those activities are distributed in following operational areas:

Power Generation

Uniper is among the largest global power generators with an installed capacity of 36.4 GW geographically distributed as follows in 2017:

Russia: 10.8

Germany: 10.5

United Kingdom: 6.4

Sweden: 4.6

France: 2.1

Netherlands: 1.6

Hungary: 0.4

Czech. Rep. 0.019

In Russia, our power plants provide approximately 5% of the country's total energy needs.

Commodity Trading

Uniper supplies counterparties with a broad range of power products and services throughout Europe and North America. We offer our customers access to European markets. We engage in supplying, storing and transporting natural gas. Uniper supplies more than 40% of wholesale gas in the German speaking markets and contributes significantly to the security of supply of gas. Uniper sources, transports and markets Liquefied Natural Gas (LNG) worldwide. Uniper´s comprehensive portfolio management service enables the company to optimise the entire coal supply chain to meet quality, timing and price requirements.

Energy Storage

Uniper´s natural gas storage sites in Germany, Austria and the United Kingdom play an important role in ensuring a secure and flexible gas supply. Hydro pumped storage power plants are essential for ensuring grid stability and for integrating power generation from wind and photovoltaic plants. Uniper offers solutions that help to limit earnings risks caused by weather fluctuations. This means that public utility companies, for example, can secure their absolute margins from the gas business segment against any temperature fluctuations.

Energy Sales

Uniper´s energy sales offer individual power, heat and natural gas supply to industrial customers and energy partners such as municipal and regional utilities in

Germany and neighbouring countries. Alongside power and natural gas supplies, Uniper also offers a wide range of services, energy-efficient, and innovative products in the context of the energy transition.

Engineering & Energy Services.

Uniper offers customers the experience of 100 years of operations to help operate and maintain power plants, engineer new plant solutions and gas infrastructure. From the earliest project phases up to commissioning and handover, Uniper leverages its extensive experience with project development and implementation. Portfolio optimization, benchmarking, maintenance strategies, lifetime extensions and asset upgrades are part of Uniper´s offering. Uniper delivers maintenance, outage management and inspection activities, and can operate assets on behalf of its customers. Uniper has first-hand experience managing the end-of life options of a broad range of energy technologies.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	January 1 2017	December 31 2017	Yes	1 year
Row 2	January 1 2016	December 31 2016	<Not Applicable>	<Not Applicable>
Row 3	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Row 4	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.

Czechia
France
Germany
Hungary
Netherlands
Russian Federation
Sweden
United Kingdom of Great Britain and Northern Ireland

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

EUR

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Financial control

C-EU0.7

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Row 1

Electric utilities value chain
Electricity generation

Other divisions
Gas storage, transmission and distribution

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?
Yes

C1.1a

(C1.1a) Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Chief Sustainability Officer (CSO)	To facilitate the cooperation among different Business Units and the Sustainability team, to ensure appropriate actions and responses as well as to monitor emerging trends and communications, the Board of Directors has delegated to one of its members (COO) the organisation and preparation of all the sustainability-related tasks at group level, namely the Chief Sustainability Officer, since 2016. While tackling this role as Chief Sustainability Officer, the Board Member has budget autonomy over Sustainability-related activities. The CSO's main task is to direct and integrate sustainability-oriented initiatives into Uniper's overall business, with the aim to protect and support the company's performance and long-term interests.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	The Uniper SE Board of Management bears overall responsibility for Sustainability Management in Uniper. The Board of Management approves the Sustainability Strategic Plan for the Group and Group Policies implementing the strategy. The Board of Management will be given advice by the central HSSE and Sustainability function and will regularly receive reports regarding Sustainability performance and activities. The Board has oversight to direct and integrate sustainability-oriented initiatives into Uniper's overall business, with the aim to protect and support the company's performance and long-term interests. Support the development of Sustainability Strategic Plans (SSP) aimed to drive a sustainability vision for the company in alignment with the overall business strategy. Set targets and oversee performance against targets. Approve appropriate budgets requirements for climate-related projects, R&D and investments. Ensure that ESG risks to the business are managed effectively and opportunities maximised, following a precautionary approach in line with internationally-recognised frameworks, specifically on environment, climate, society and human rights protection. Secure and leverage senior level commitment and support for integrating sustainability initiatives and principles into core processes and decision-making Approve levels of disclosure of company information for the different audiences they are aimed for.

C1.2

(C1.2) Below board-level, provide the highest-level management position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)	Managing climate-related risks and opportunities	Quarterly
Other, please specify (Executive Vice President HSSE&Sustain.)	Both assessing and managing climate-related risks and opportunities	Quarterly
Chief Risks Officer (CRO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify (HSSE & Sustainability Council)	Assessing climate-related risks and opportunities	Quarterly
Please select	<Not Applicable>	<Not Applicable>

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored.

Chief Sustainability Officer (CSO): Board Member in his integrated role as Chief Operations Officer and Chief Sustainability Officer, Highest responsible for decisions related to corporate Sustainability, Highest level management, including monitoring and decision-making processes of climate related topics related to operations, regulatory framework and strategy.

Executive Vice President of HSSE & Sustainability: Appointed by and reporting directly to the Chief Sustainability Officer, The Executive Vice President Sustainability & HSSE directly reports to the CSO and provides support to the CSO's decisions and tasks as above. Specific responsibilities include:

· Allocation of sufficient resources to the requirements for Sustainability Management in Uniper;

· Monitor and evaluate the effectiveness of Uniper's Sustainability Strategic Plans.

· Identify challenges, risks, megatrends and emerging issues that will affect Uniper.

· Approve the budgets for Sustainability projects, prioritizing those initiatives aimed to address key material issues.

The EVP HSSE & Sustainability continuously monitors and supervises projects, voluntary initiatives and KPIs related to climate, for example:

Carbon accounting information is monitored and tracked via various data collection tools and reported to ensure that our climate target is tracked.

Historical emissions are studied and trends monitored.

Regulatory and energy policy updates are monitored through engagement with stakeholders, information from our Governmental Relations colleagues and regulation review. Developments in new frameworks and tools are also monitored such as assessment of TCFD recommendations.

Chief Risk Officer (CRO): Highest internal position related to risk management, reporting to the Chief Financial Officer (CFO); The CRO is responsible for ensuring that:

· Enterprise risks, including climate-related risks, are understood by the organization, by the Management Board as well as Audit & Risk Committee of the Supervisory Board.

· Risk is quantified and depicted in a way that is actionable.

· Risks are warehoused according to Uniper's capabilities, core business and risk

· strategies, appetite for uncertainty and capital resources.

· Unwanted risks are minimized or removed into appropriate markets where possible.

The CRO has the final responsibility to include identified climate related risks into corporate risk. This is done through monitoring of risk frequency and severity through ERM.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

Yes

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.

Who is entitled to benefit from these incentives?
Board Chair

Types of incentives
Monetary reward

Activity incentivized
Behavior change related indicator

Comment
Financial incentives are linked to Board members and one level below management group for the achievement of the objectives stated in the HSSE & Sustainability Improvement Plan. In 2017 one of these objectives was to develop Sustainability Strategic Plans with a focus on our most material topics of which the key topic is Climate Change.

Who is entitled to benefit from these incentives?
Management group

Types of incentives
Monetary reward

Activity incentivized
Efficiency project

Comment
Financial incentives are linked to Board members and one level below management group for the achievement of the objectives stated in the HSSE & Sustainability Improvement Plan. In 2017 one of these objectives was to develop Sustainability Strategic Plans with a focus on our most material topics of which the key topic is Climate change. Also, measures increasing efficiency in production (thermal and energy efficiency, which result in CO2 reductions) are rewarded at this management level.

Who is entitled to benefit from these incentives?
Environment/Sustainability manager

Types of incentives
Monetary reward

Activity incentivized
Other, please specify (Carbon footprint and monitoring)

Comment
Currently the incentives policy for climate related issues is implemented at project level and therefore incentives are alligned with project performance of projects. This is the general approach for any Uniper employee. In the case of employees with responsibilities in projects related to climate climate change, their performance on specific project related milestones is assessed and rewarded in the frame of the constractual conditions on variable remuneration. One example of climate related incentives: Energy efficiency (with respective reduction of CO2 emissions) is part of the performace KPI of the Energy Efficiency Manager.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	0	1	We define Short Term as immediate future for which uncertainties related to operations, market development and political & regulatory constraints are relatively low, allowing a high certainty in business development forecasts.
Medium-term	1	3	Medium-term is defined as the time frame for which the above-mentioned uncertainties are measurable, allowing a known level of certainty in financial planning. Time frames are in line with Uniper's Medium-Term Planning (MTP) which is a Group-wide term.
Long-term	3	10	Long term is defined as the time frame for which above mentioned uncertainties are much greater and more difficult to measure. This is viewed as the strategic horizon.

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.
Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	Uniper identifies, assesses, manages its risks and chances combining efforts from both functional units and a central enterprise risk management (ERM) system that considers all risk and chance categories.

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

Within Uniper there are 2 main processes which identify and assess Climate-Related Risks and Opportunities depending on the time horizon associated with the risks:

• Short and Medium-Term Time Horizon: The Enterprise Risk Process

• Long Term Time Horizon: Uniper Strategy Review Process

The descriptions below refer primarily to risk identification and assessment, however the same approaches apply to Opportunities.

The Enterprise Risk Process

Uniper's risk management process is overseen by the Uniper BoM the Audit & Risk Committee of the Supervisory Board. On a quarterly basis, the material financial risks from across the Group are reported by the Chief Risk Officer to both governance bodies. The key risks are publicly communicated in the Uniper SE Annual Report. The basis for creating transparency of the material financial risks and to enable them to be managed is the Group Enterprise Risk Management (ERM) process.

The ERM process requires that all functions across the Uniper Group identify and assess their material risks, including those which are climate-related, on a quarterly basis through a bottom-up process. The HSSE & Sustainability function has also undertaken a systematic identification and classification of climate-related risks, as an individual, but also complementary component of the ERM process.

Climate-related risks are defined as uncertain events which can cause a significant negative financial impact on the company and the environment and/or society. Climate-related risks are identified from expert knowledge, publications, associations and memberships and other information from external and internal sources such as current and emerging legislation, government policy, stakeholder communications including interactions with NGOs, investors and asset level risk assessments. These risks are identified on different levels in the organization i.e. political developments are monitored on national and regional levels and form part of wider-ranging global risks impacting the organization. Potentially relevant climate related physical impacts like extreme weather events such as floods/storms are monitored at an asset level.

The identified risks are assessed in quantified financial terms wherever possible. Any risk which is assessed as having a potential net worst case impact of EUR -20M in any 1 year (EUR +20M for an Opportunity) and has not already been considered in medium-term financial planning is included in the ERM process. Quantified material Enterprise Risks are assessed based on either the potential impact on Net Income, the potential impact on Adjusted EBIT, the potential impact on cash or any combination of all 3 metrics. If the impact on different metrics is distinctively different, the risk or chance is split in several separate items. Any insurance coverage and/or provisions which reduce the worst-case impact are also considered. The likelihood of occurrence is also considered and a range of statistical distributions support in deriving an expected value risk impact. Where quantification is not possible for varying reasons, a qualitative assessment of individual risks is made. Qualitative risks are assessed based on pre-defined ranges for their likelihood of occurrence and the materiality of their potential impact.

Substantive financial impact: Uniper considers risks to have a substantive financial impact when they endanger the achievement of the group financial targets for a certain year in the planning horizon. This is the case if a materializing risk could force the Board of Management to change its dividend guidance, its EBIT guidance or the groups rating. As Uniper measures risks against different financial KPIs there is not one EUR threshold which makes a risk substantive.

Based on the assessment of the risk, actions are taken to ensure that the impacts are mitigated and managed as effectively as possible. This is a continuous and interactive process with relevant stakeholders and is subject to ongoing monitoring and review.

Climate-related risks and opportunities are also specifically identified as part of the Strategy process and are based on known facts such as the decarbonisation of the energy sector which poses a risk or opportunity for Uniper and anticipating trends such as shifts towards new and cleaner technologies which could pose an opportunity.

Each strategic risk and opportunity is assessed based on the perceived strategic importance to the organisation, aligned to the defined Corporate Strategy. If a risk is perceived as having strategic importance, then a suitable mitigation strategy is developed to mitigate the negative impact as much as possible. If an opportunity is perceived as having strategic importance then an active strategy to pursue and maximise the positive impact of the opportunity is developed. Continuous monitoring of the delivery of the Corporate Strategy is performed by the Uniper BoM with oversight from the Uniper Supervisory Board.

C2.2c

(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Example of risk type: The Large combustion plant BREF (Best Available Technologies Reference document) is legally active under the Industrial Emissions Directive. Uniper will need to be compliant with the amended emissions thresholds and re-permitted by 2020. Inclusion in climate-related risk assessment: This risk is identified and assessed under ERM. There is a dedicated project team to look at the risks and implementation of BREF – this includes members from the Asset Risk team and the HSSE team.
Emerging regulation	Relevant, always included	Example of risk type: Upcoming changes in governmental policy on coal closure. Inclusion in climate-related risk assessment: This risk has been identified and assessed in ERM for the countries where Uniper operates and the policies have been announced. There is a watching brief on emerging policy and regulation.
Technology	Relevant, always included	Example of risk type: Costs to transition to lower emissions technology to meet requirements for BREF. Inclusion in climate-related risk assessment: This risk is identified and assessed under ERM. There is a dedicated project team to look at the risks and implementation of BREF – this includes members from the Asset Risk team and the HSSE team.
Legal	Relevant, always included	Example of risk type: Potential penalties and fines against Uniper for failing to comply with EU Emissions Trading Scheme. Inclusion in climate-related risk assessment: This risk is assessed at a Group level under ERM, under all the countries where Uniper operates and EU ETS applies.
Market	Relevant, always included	Example of risk type: Changing customer behaviour towards low carbon energy generation. Inclusion in climate-related risk assessment: This risk is assessed at a Group level as part of the Strategy Review process.
Reputation	Relevant, always included	Example of risk type: Uniper's contribution to climate change from carbon emissions may affect its reputation as a large polluter and contributer to the impacts caused by climate change. This in turn may affect investment into Uniper - investors of Uniper expect to invest in a company that only works with ethical suppliers and that the risks are minimised through effective due diligence. Inclusion in climate-related risk assessment: This risk is assessed by the HSSE & Sustainability team and included in the ERM process where applicable.
Acute physical	Relevant, always included	Example of risk type: Increased severity of extreme weather events leading to impacts such as floods/storm damage to Uniper assets. Inclusion in climate-related risk assessment: These risks are assessed in conjunction with Asset Risk and the Risk Insurance team and included in the ERM process where applicable.
Chronic physical	Relevant, sometimes included	Example of risk type: Sea level rise which could potentially affect Uniper assets in coastal regions. Inclusion in climate-related risk assessment: These risks are assessed in conjunction with Asset Risk and the Risk Insurance team and included in the ERM process where applicable.
Upstream	Relevant, always included	Example of risk type: Disruptions to fuel supply through supply chain from extreme weather events. Inclusion in climate-related risk assessment: These risks are assessed in conjunction with Asset Risk and the Risk Insurance team and included in the ERM process where applicable.
Downstream	Relevant, always included	Example of risk type: Reduced demand for goods and/or services due to shift in consumer preferences. Inclusion in climate-related risk assessment: This risk is assessed at a Group level as part of the Strategy Review process.

C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

The descriptions below refer primarily to the management of risks - the same approaches apply to Opportunities.

Climate-related risks and opportunities are managed in the same way as all risks across the Uniper Group, in that they are managed proactively and continuously by the most effective and efficient measures and actions available. Measures and actions include but are not restricted to the implementation of adequate and effective controls, avoiding and restricting specific actions and options, and ensuring effective legal and insurance coverage. Climate-related risks are managed by the individual function which is most capable of managing the specific risk based on expertise and experience of the specific risk topic. The function decides on and or endorses the most appropriate course of action to effectively and efficiently manage the risk i.e. acceptance, alleviation, transfer of risks either individually or jointly across functions within the Uniper Group. All climate-related risks are managed across the Uniper Group irrespective of materiality. However, the more material risks are prioritised based on the potential impact materiality, with the material climate-related risks being given greater management attention and focus via the Group-wide Enterprise Risk Process and or Strategy Review process. Climate related risks which could potentially become a threat to Uniper's existence are managed effectively and countermeasures are taken. Decisions over how the risks are managed are made based on the materiality of the risk, the timing of the potential impact to the organisation and the available resources to effectively manage the risk.

Example of how a Transition risk is managed:

To support the implementation of the Paris Agreement various measures are taken to increase the Carbon price. The Market Stability Reserve in the EU ETS is one component with effect across Europe. This is complemented (or planned to be complemented) by various country specific measures such as Carbon floor prices or Carbon Taxes. Due to this Uniper expects an increase of the Carbon price over the coming years which will increase the cost for its fossil fuel based energy production. To the extend these additional costs cannot be passed on, Uniper will suffer from lower margins and may have to shut down some of its assets which are made uneconomical by this development. To manage this, Uniper continually monitors the Carbon price development and the political and regulatory decisions driving it. Where meaningful and possible hedges are put in place however there will always remain a residual open position which is exposed to price increases.

Example of how a Physical risk is managed:

Climate change may lead to lower availability and energy production from Uniper’s asset fleet. Longer hot and dry periods like in 2003 or 2018 can lead to cooling water availability issues because river levels are too low to extract cooling water or water temperatures are too high for cooling. Low water levels on rivers increase fuel shipping costs as ships can’t carry the normal load and they reduce energy production volumes in river plants. The increase of extreme weather scenarios may lead to damages to our plants from floods/storms and cause unplanned outages. To manage this where possible and meaningful, unavailability is insured. Fuel shippings are scheduled such that drought periods are avoided, or alternate transportation via rail is being pursued.

Examples of how other climate-related risk types are being managed:

• **Emerging Regulation Risk**: The Uniper Group manages climate-related regulatory developments on an ongoing basis with there being a dedicated function overseeing all political and regulatory developments which could pose a risk or opportunity for Uniper. Management actions and measures include; active lobbying of regulatory developments, maintenance of an open dialogue with regulators, governmental bodies, political parties and environmental associations to allow Uniper a voice over regulatory developments and continuous monitoring of the climate-related regulatory landscape. These actions ensure that Uniper has an understanding and ability to influence emerging regulation which impacts the organisation.

• **Acute Physical Risk:** The Uniper Group manages climate-related physical risks including extreme weather events and events impacting asset availability e.g. the inability to operate cooling units for assets due to water scarcity on an ongoing basis across multiple dedicated functions on both an individual asset level and Group level. Management actions and measures include: investment in technology improvements and asset optimisation, ongoing maintenance and inspection, business continuity planning to manage

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Risk 1

Where in the value chain does the risk driver occur?
Direct operations

Risk type
Transition risk

Primary climate-related risk driver
Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact driver
Policy and legal: Write-offs, asset impairment, and early retirement of existing assets due to policy changes

Company- specific description
The Uniper Group is exposed to the risks of policy and legal changes. In Europe, the focus is on decarbonization with the continued strong growth in the expansion of renewables and stricter climate protection regulations of planned, and in some cases, already approved phase-out of coal in numerous European

core countries and where Uniper operates. Due to the ongoing debate across Europe on the early exit from coal powered generation, Uniper faces the risk of lost revenues, potential asset impairments in case no adequate compensation will be granted and dismantling and social plan costs due to having to exit from coal generation earlier than our financial planning assumes. The main countries impacted for Uniper are Germany, Netherlands, France and UK.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium-high

Potential financial impact

Explanation of financial impact
The close out is long term but the impact on Uniper's financial planning e.g. via impairments starts with the decision of an early exit, in case no adequate compensation will be granted, while social and dismantling costs will mostly occur only at the time of closure. To reflect this the risk was classified as the lowest denominator short term but different impacts will affect Uniper in the short, medium and long term.

Management method
Uniper supports the EU legally binding climate agreements but this must be aligned with continuing to supply a stable and affordable power supply. To limit regulatory risk, the Uniper Group maintains intensive dialogue with external stakeholders such as government agencies, political parties, regulators and associations, to identify in a timely manner any potential adverse effects on the Uniper Group arising from changes in the political, regulatory and legislative environment and to reduce this risk through involvement in shaping the proposed measures. In case of the Coal exit this means Uniper will accept the political decisions made but will also seek compensation for any adverse financial effects.

Cost of management

Comment

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type
Transition risk

Primary climate-related risk driver
Policy and legal: Increased pricing of GHG emissions

Type of financial impact driver
Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description
To support the implementation of the Paris Agreement various measures are taken to increase the Carbon price. The Market Stability Reserve (MSR) in the European Emissions Trading System is one component with effect across Europe. This is complemented (or planned to be complemented) by various country specific measures such as Carbon floor prices or Carbon Taxes. Due to this Uniper expects an increase of the Carbon price over the coming years which will increase the cost for its fossil fuel based energy production. To the extend these additional costs cannot be passed on, Uniper will suffer from lower margins and may have to shut down some of its assets which are made uneconomical by this development.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

Potential financial impact

Explanation of financial impact
Impact is based on Uniper's average unhedged Carbon position until 2025 and the expected Carbon price increase until then.

Management method
Uniper continually monitors the Carbon price development and the political and regulatory decisions driving it. Where meaningful and possible hedges are put in place however there will always remain a residual open position which is exposed to price increases.

Cost of management
25000

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type
Physical risk

Primary climate-related risk driver
Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact driver
Reduced revenues from lower sales/output

Company- specific description
Climate change may lead to lower availability and energy production from Uniper's asset fleet. For example, longer hot and dry periods like in summer 2003 or 2018 can lead to cooling water availability issues because river levels are too low to extract cooling water or water temperatures are too high for cooling. Dry periods in the Nordic countries can reduce the water availability for hydro power generation. Also, low water levels on rivers increase fuel shipping costs as ships can't carry the normal load and they reduce energy production volumes in river plants. On the other side the increase of extreme weather scenarios may lead to damages to our plants from floods, storms, earthquakes, etc. and cause unplanned outages.

Time horizon
Current

Likelihood
Unlikely

Magnitude of impact
Low

Potential financial impact

Explanation of financial impact
Impact is based on plants not able to run although being economical e.g. due to cooling water unavailability or being offline for repairs after extreme weather damages. In addition to this higher fuel shipping cost may occur due to low water levels in rivers.

Management method
Where possible and meaningful, unavailability is insured. Fuel shippings are scheduled such that drought periods are avoided.

Cost of management

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Markets

Primary climate-related opportunity driver
Other

Type of financial impact driver
Other, please specify (Increased power priced)

Company- specific description
As Power is still to a big extent produced with fossil fuels where emissions need to be covered via Carbon certificates, the Carbon price is a major driver of the Power price. The discussed coal exit will reduce the available Supply and is expected to contribute to increasing Power prices. As Uniper also has Hydro and Nuclear assets which don't require Carbon certificates it would benefit from higher Power prices without the offset on the Carbon cost side.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

Potential financial impact

Explanation of financial impact
Increased revenues from Nuclear and Hydro plants due to increasing Power prices.

Strategy to realize opportunity
Reduce hedge ratio of power positions from Hydro and Nuclear plants.

Cost to realize opportunity
0

Comment
No additional cost to realize the opportunity.

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Markets

Primary climate-related opportunity driver
Other

Type of financial impact driver
Other, please specify (Higher profitability of gas business)

Company- specific description
Uniper could benefit from increased revenues from our Gas fired Power plants in case they are needed within the merit order alongside the planned Coal exit and expected rising Power prices and Gas through additional overall market demand. This could happen as flexible Gas plants are an ideal partner to secure security of supply for an increasing renewable production. In addition to this Uniper could benefit from higher revenues resulting from possible higher Gas sales and Gas optimization revenues on the back of the above effects.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium

Potential financial impact

Explanation of financial impact
Increased revenues from Gas plants and Gas Sales & Optimization business in case Gas plants come into the merit order.

Strategy to realize opportunity
For some of our gas plants our strategy is to ensure these are operated and maintained in the most (cost) effective way and targeted improvements for e.g. efficiency, flexibility, component life etc are assessed and implemented. Secondly, mothball gas plants while out of the merit order to keep the optionality to bring them back into the market once energy-only or capacity remuneration is attractive again.

Cost to realize opportunity
0

Comment
No additional cost to realize the opportunity.

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Markets

Primary climate-related opportunity driver
Access to new markets

Type of financial impact driver
Increased revenues through access to new and emerging markets (e.g., partnerships with governments, development banks)

Company- specific description
Developments in the political and regulatory environment in the countries in which Uniper is active can have a positive impact on the earnings, financial and asset situation. For example, the introduction of additional capacity markets could mean that the supply of flexible power plants to compensate for the fluctuating generation of renewable energies is possible under better conditions than previously planned. In addition, new technologies such as the conversion of electricity from renewable energies into gas (Power to Gas) or heat (Power to Heat) or products and services in the area of transportation could open up additional sources of revenue, for example LNG for trucks/ships.

Time horizon
Medium-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Potential financial impact

Explanation of financial impact
We expect to identify new products and markets which can replace some of the lost revenues from Coal exit and plant closures due to other reasons.

Strategy to realize opportunity
Significant opportunities regarding the market environment are addressed in the strategy process through diversification of the Uniper portfolio and research and implementation of new technologies such as battery storage and power to gas. Uniper is also diversifying its products and engineering services and expertise by entering developing and emerging markets. Our Innovation and Energy and Engineering services have set up dedicated teams and projects to realize these potential opportunities.

Cost to realize opportunity

Comment

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Not yet impacted	Due to the shift in customer preference to lower carbon / climate friendly energy sources, Uniper will be impacted by having to develop new products and services aligned to this trend. The impact of this will be Medium-low and expected in the Medium term.
Supply chain and/or value chain	Not yet impacted	Early coal closure will affect the full coal-fired power plants supply and value chain at Uniper. Specifically, the fuel supply chain will be impacted as coal will no longer need to be procured as the associated plants will be closed. The impact of this will be Medium-low and expected in the Short-term as although there will be financial impacts for the generation supply chain, Uniper will continue to trade in physical coal globally.
Adaptation and mitigation activities	Impacted	Due to Uniper being vulnerable to extreme weather patterns, Uniper must ensure that effective measures are in place to both reduce its contribution to climate-change as well as building the resilience against the impacts of it. This impacts Uniper as there needs to be continuous expert analysis of meteorological and hydrological fluctuations, effective business continuity planning and ongoing investments in asset optimisation and maintenance. These aspects impact Uniper in the form of costs and are estimated as being Medium-low as initiatives and controls are continually developed, implemented and managed acorss the organisation.
Investment in R&D	Impacted	For opportunities to be realized in new lower carbon /climate friendly technologies, Uniper will need to further invest in R&D to maximise these opportunities. The impact of this is Low as although an R&D budget will need to be spent, each opportunity will need to be assessed for its financial viabililty and only those which indicate a profit will be actively pursued.
Operations	Impacted	Due to the ongoing exit of coal-fired power plants and the growth of renewables across Europe, Uniper is impacted by lower load factors of its conventional plants as well as the closure of specific plants across it's European asset fleet. This will heavily impact the operations of such plants and the supporting infrastructure of these operations as arrangements will need to be made to discontinue these in a safe and effective way. The impact of this will be Medium-high in the Short-term and will take the form of asset values and increased costs for dismantling and social plans.
Other, please specify	Please select	

C2.6

(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

	Relevance	Description
Revenues	Not yet impacted	Due to the ongoing exit of coal-fired power plants and the growth of renewables across Europe, Uniper is impacted by lower load factors of its conventional plants as well as the closure of specific plants across it's European asset fleet. This will need to be factored into Uniper's financial planning in the form of reduced future revenues with the impact being Medium-high.
Operating costs	Impacted	Operating costs associated with the ongoing adaption and mitigation techniques associated with being vulnerable to extreme weather events are continually factored into Uniper's financial planning process already today with the impact being Medium.
Capital expenditures / capital allocation	Impacted	Capital expenditure/capital allocation associated with the R&D initiatives into lower carbon /climate friendly technologies are factored into Uniper's financial planning process already today with the impact being Low. There is a clear decision not to allocate any capex to new build coal fired plants.
Acquisitions and divestments	Not yet impacted	Depending on the development of the carbon price, and the potential risk that this would make some of Uniper's fossil fuel based generation assets non-econonical, it could be foreseen that Uniper would need to factor divestments of these plants into the financial planning process with the impact being Medium.
Access to capital	We have not identified any risks or opportunities	It is not forseen that Uniper would need to raise additional capital to fund any effects of climate change related risks/opportunities and therefore would not need to be factored into the financial planning process. Any planned initiatives would be funded by existing capital.
Assets	Impacted	Due to the planned exit of coal-fired power plants across Europe, Uniper will be impacted by having to close specific plants across it's European asset fleet. This has already been partially factored into the financial planning process in the form of reduced asset book values of affected plants with the impact being Medium-high.
Liabilities	Not yet impacted	Due to the planned exit of coal-fired power plants across Europe, Uniper will be impacted by having to close specific plants across it's European asset fleet. This has could lead to Uniper having to include additional provisions for the dismantling of the impacted plants and associated social plans for the effected employees with the impact being Medium.
Other	Please select	

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

Yes, qualitative and quantitative

C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b)

(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.

In development, we plan to complete it within the next 2 years

C3.1c

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

How business objectives and strategy have been influenced by climate-related issues

Market and regulatory climate-related transition risks represent substantial elements in our business strategy. This emerged in the process undertaken in 2017 to define Uniper business strategy for the next decade. The planning effort included a climate-related scenario for comparison with the base case scenario, an evolutionary development of the energy markets. Among other things, the climate-related scenario covered the future EU ETS carbon price developments – as this directly affects the profitability of our assets (notably conventional power plants) in an increasingly decarbonized environment. Outcomes of this strategic process are reflected in some essential conclusions that will inform our business planning.

For the medium term we anticipate relevant adjustments for the energy system where our conventional power plants will be increasingly used to ensure security of supply. The plan is to make optimal use of the existing, very well positioned portfolio and to selectively expand it in the changing environment. In terms of growth investments, Uniper will focus on the gas business, both in power plants and in the gas midstream and LNG business.

The role of natural gas (and LNG) as bridging fuel for the global energy transition represents a climate-related market opportunity, particularly for our trading business. Uniper plans to expand its global portfolios of energy and commodity positions as well as its global energy trading activities by concluding additional procurement and delivery positions. At the same time, the company might enter into partnerships in commodity procurement and marketing, to further diversify the portfolio.

A diversification strategy will be followed also by our coal trading desk, looking to expand beyond the segment of thermal coal, expected to decrease also due to environmental and climate-related concerns. Such an approach will allow to reduce market risks, mitigate the financial impacts of the coal phase out for energy use in several EU countries and to minimise potential climate-related supply chain disruption risks arising in countries were coal mining is hampered.

Uniper will continue to be confronted with a rapidly changing energy landscape: decarbonization, decentralization and digitization are three trends that will have a major impact on the energy world. Uniper has invested in efficiency (process and technical efficiency), energy storage and carbon utilization technologies. An example is the new power-to-gas plant in Falkenhagen (Germany), which allows the storage and usage of surplus energy from wind turbines as hydrogen and methane for transport and heating.

Relevant business decisions and examples of substantial strategic developments driven by climate-related issues

Among the most substantial business developments that were made by climate-related aspects is the decision to not invest in any new coal-fired power plant after

the commissioning of our 1.1 GW coal-fired power plant in Datteln, Germany. This decision was discussed at top management level since 2017 and was communicated in 2018. The decision was made in consideration of the ongoing coal phase out commitments/discussions in several EU member states where Uniper has operations.

Furthermore, we sold our upstream stake in Yuzhno-Russkoye, a gas field in Russia, and have currently no plans to directly own any stakes in gas exploration and production or to invest directly in coal mining. The company might instead enter into partnerships in commodity procurement and marketing, to further diversify the portfolio. This development should consolidate Uniper role as a mid-stream player and contribute to avoid direct exposure to any climate-related sharp devaluation of fossil reserves.

Links between strategy and emission reduction targets

The implementation of our business strategy seeks a balance between ensuring security of supply and supporting global decarbonsiation. Dedicated sustainability commitments have been approved by the Board of Management, for integration into the described strategy. A Sustainability Strategic Plan proposes improvement targets for Uniper main ESG performances, including climate-related ones.

Here below the general climate-related commitments:

1) Promote lower carbon fuels like gas and LNG worldwide and expand our global gas and LNG third-party trading

2) Develop business models for Carbon Utilization

3) Promote less carbon-intensive power generation technology

4) Monitor and optimize our assets' carbon intensity

Internal capacity building efforts have been promoted, to better support the business and increase awareness of internal stakeholders.

As part of the sustainability strategic plan, a climate action plan will be drafted. This plan, which can be considered an important building block in the development of a low-carbon transition plan, includes three lines of actions:

· Climate related Action Prioritization (Functional level): set of actions to be undertaken by specific functions and teams

· Climate related Risk/Opportunity Management in consideration of TCFD recommendations

· Climate related Scenario Analysis: based on the IEA WEO 2017 SDS, a new process to assess and monitor the strategy resilience against extreme climate-related scenarios.

Uniper set a group-wide carbon intensity target in June 2018 of 500 g of CO2 per kilowatt hour (on average) from 2018 to 2020. For the next decade, we see further potential for reductions due to our stable hydro and nuclear business, the effects of possible coal phase out in many European countries and an overall stronger role for climate-friendly natural gas.

C3.1d

(C3.1d) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios	Details
Other, please specify (Internal Scenario (alternative World))	In the process undertaken in 2017 to define Uniper business strategy for the next decade, a climate-related scenario focused on environmental concerns was included for comparison with the base case scenario. The original scenario anlysis performed in 2017 was limited to: - a 2030-time horizon - a qualitative and quantitative analysis of the main global trends, including assumptions for: demographic growth, changes in global energy demand, technological innovation and key environmental concerns. - A quantitative analysis of the main commodity prices forecasts until 2030 based on several sources. - A qualitative analysis of the impacts on the world and by country of operation, regarding the expected impacts of such trends - Qualitative analysis by each Uniper business segment - This analysis represented an alternative scenario to the planning case, upon which the strategy has been developed. Sources like IEA 450, NDCs and others were taken in account for validation and benchmarking. No exercise was undertaken in 2017 to specifically test the resilience of the business strategy under extreme climate-related scenarios, as the year-long process undertaken in that period was aimed to define the strategy itself. Organizations should disclose their inputs, assumptions and analytical methods used for this scenario. For existing scenarios (e.g. IEA 450 etc.), organizations should disclose how they have altered/changed the inputs, assumptions or analytical methods to cater to their needs.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

No target

C4.1c

(C4.1c) Explain why you do not have emissions target and forecast how your emissions will change over the next five years.

	Primary reason	Five-year forecast	Please explain
Row 1	We are planning to introduce a target in the next two years	In June 2018 Uniper set a group-wide carbon intensity target of 500 g of CO2 per kilowatt hour (on average) from 2018 to 2020. For the next decade, we see further potential for reductions due to our stable hydro and nuclear business, the effects of possible coal phase out in many European countries and an overall stronger role for climate-friendly natural gas.	The reason for not having a target in 2017 are operational and regulation driven. On the operational side, Uniper became active in January 2016 as result of the splitting process of a larger holding. The adaptation to the new conditions, including redistribution of new responsibilities made it difficult to take climate related commitments, nonetheless Uniper made its first corporate carbon accountability beyond EU-ETS compliance in 2016. On the other hand, the European energy market is currently affected by the political and regulatory uncertainty derived from ongoing discussions on mechanisms to achieve climate related commitments. These measures include decisions like coal phase out plan and a framework for a capacity market. First results of the German Coal Comission (officially "Commission for Growth, Structural Change and Employment") are expected by the end of 2018. These decisions could have a significant impact on Uniper´s activities. The company has decided to set the first climate related milestone as a mid-term objective (500 g of CO2 per kWh on average 2018 - 2020, under the financial control boundary).

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

Target
Energy usage

KPI – Metric numerator
GWh

KPI – Metric denominator (intensity targets only)

Base year
2017

Start year
2018

Target year
2022

KPI in baseline year

KPI in target year

% achieved in reporting year
0

Target Status
Underway

Please explain
Once reductions in energy consumption are achieved emissions will be reduced in a very marginal proportion.

Part of emissions target

Is this target part of an overarching initiative?
No, it's not part of an overarching initiative

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	1	0
To be implemented*	0	0
Implementation commenced*	1	0
Implemented*	2	63230
Not to be implemented	1	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Activity type
Low-carbon energy installation

Description of activity
Other, please specify (Hydrogen generation via electrolysis)

Estimated annual CO2e savings (metric tonnes CO2e)
0

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
0

Investment required (unit currency – as specified in CC0.4)

Payback period
Please select

Estimated lifetime of the initiative
1-2 years

Comment
STORE&GO Falkenhagen Synthetic Natural Gas. This initiative (co-funded by the EU) allows the CO2-free production of hydrogen via alkaline electrolysis using 100% renewable (wind or solar) energy. Produced hydrogen can be directly used, injected into the natural gas pipelines or further transformed into synthetic methane gas vía methanation, for which CO2 is added. Decoupling the energy from its renewable sources contributes to solve the issue of security of supply from those sources. Methanation Plant: - Full load capacity : 57 Nm3/h - Full load hours: 2000 p.a. - 114000Nm3 p.a. - Natural Gas would otherwise emit 228 t CO2. Project consortium consists of 28 members across Europe Opening: May 2018 Commissioning: July 2018 No commercial project, but technical demonstration Methanation plant in Falkenhagen will be operated for 2 years; after test operation it will be decided, whether plant will be further operated or decommissioned

Activity type
Low-carbon energy installation

Description of activity
Natural Gas

Estimated annual CO2e savings (metric tonnes CO2e)
500

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
250000

Investment required (unit currency – as specified in CC0.4)

Payback period
4 - 10 years

Estimated lifetime of the initiative
6-10 years

Comment
LIQVIS: this Uniper subsidiary develops LNG terminals and tanking systems for the transportation and logistic sectors. With LNG´s significantly improved climate performance (trough decreased CO2 emissions) and lower costs in regard to Diesel, through this business LIQVIS expects to have a role in the energy transition to a low carbon economy.

Activity type
Energy efficiency: Processes

Description of activity
Heat recovery

Estimated annual CO2e savings (metric tonnes CO2e)
3465

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
2400000

Investment required (unit currency – as specified in CC0.4)

Payback period
1-3 years

Estimated lifetime of the initiative
16-20 years

Comment
Representatives of Minegas and Uniper Wärme GmbH commissioned in 2017 the heat recovery from the existing CHP blocks located in the Hugo 2/5/8 Shaft facility close to Gelsenkirchen. With a heat capacity of 3,5 MW the heat injected into Uniper heat pipelines can cover the heat needs of about 2000 households.

Activity type
Energy efficiency: Processes

Description of activity
Other, please specify (Efficiency increase at CCGT plants)

Estimated annual CO2e savings (metric tonnes CO2e)
30000

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
100000

Investment required (unit currency – as specified in CC0.4)

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment
Transversal efficiency project for CCGT assets aiming to set measurable targets as part of ISO 50001 Energy Management certification. Focus on sharing relevant information among assets. Built upon existing energy saving projects. Examples in 2017 include CDC (UK), Grain (UK), Gonyü (HU)

Activity type
Process emissions reductions

Description of activity
Other, please specify (CO2 capture by chemical binding)

Estimated annual CO2e savings (metric tonnes CO2e)
0

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

Investment required (unit currency – as specified in CC0.4)

Payback period
Please select

Estimated lifetime of the initiative
Please select

Comment

Activity type
Energy efficiency: Processes

Description of activity
Other, please specify (Energy efficiency in Berjo plant)

Estimated annual CO2e savings (metric tonnes CO2e)
29265

Scope
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
70000

Investment required (unit currency – as specified in CC0.4)

Payback period
4 - 10 years

Estimated lifetime of the initiative
Please select

Comment

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for low-carbon product R&D	Carbon recycling/ CO2 utilization Converting captured CO2 into competitive and sustainable products can contribute to reducing CO2-emissions. That's just one example of how we are thinking about changes in the energy sector to attractive business opportunities – for us and for our potential customers. Because we see CO2 as a valuable resource, not a waste product. These business models are part of Uniper's DNA, owing to the experience we have in capturing CO2 at our power plants. Moreover, in the past we've also made direct use of CO2, by supplying it to greenhouses, for example. We intend to build on this experience and will continue to expand our know-how in the field of CO2 conversion to create high-quality products, chemicals and fuels. We believe we will be able to develop viable and scalable business models in this field. Technical feasibility is an important issue – one we are working on intensively. Of equal importance, however, is the need to eliminate the legal and regulatory barriers to large-scale deployment of these new technologies. A goal that we at Uniper are also committed to achieving. Supplying carbon to greenhouses in Russia: ECO-Culture, one of Russia's biggest agricultural companies, is building a large complex of greenhouses near our Berezovskaya power plant, which is currently undergoing repairs. When these are completed, Berezovskaya will provide heat and CO2 to the greenhouses. This will enable it to derive more energy from each unit of fuel and to put some of its carbon emissions to good use.
Dedicated budget for low-carbon product R&D	Hydrogen Decarbonization is the most important driver for long-term scalable hydrogen business, but there are also short-term drivers such as local emission reduction, security of supply, diversification, system optimization and technology switch. Beside our already operational sustainable hydrogen production installations (electrolysis in Falkenhagen and Reitbrook, Germany) we investigate, where hydrogen could play already today a relevant role, to support and develop the sustainable hydrogen market to take off. The uptake of the market depends mainly on political agenda and technology costs.
Dedicated budget for energy efficiency	New flexibility New flexibility based on innovative technologies for the power grid is part of our innovation agenda – power-to-gas for sector coupling is one element of this activity that addresses also the low-carbon hydrogen market. Another key element is battery storage: -peaking and peak shaving capacity and integration of renewable energy systems enabling the energy transition -demand reduction & management for industry -ancillary grid services to enable higher share of intermittent renewables in the power grid In 2017 we have successfully marketed the flexibility of M5BAT (a hybrid of different battery technologies that optimally combines storage capacities for periods of seconds, minutes or hours, whereby the storage system is designed for a total storage capacity of around 5 megawatt hours (MWh)). Additionally, we explore e-mobility and help overcome one of its major concerns: fast charging must be available everywhere for everyone. With our know how in energy we explore the options to become the enabler for the breakthrough of e-mobility. Additionally, we do see the potential of mobile EV batteries to become an energy storage to increase integration of renewable electricity.
Dedicated budget for other emissions reduction activities	Explorer project: Project to test different ideas where renewables are used in “hybrid” solutions aiming at industrial customers. “hybrid” solution is a combination of renewables, energy storage, possible dieseland/or gas engines and digital technology. Goal is to decide if this is something for Uniper to do on a larger scale or not and how this should be done if it is decided to proceed.
Compliance with regulatory requirements/standards	Upstream: In Europe EU ETS compliance requirements drives emission reduction activities, additionally the German federal government’s policy decisions to the phase out of nuclear power by 2022 and to transform the country’s energy system; Downstream: In the UK for example there is CERT and CESP which drive emission reduction activities.
Dedicated budget for energy efficiency	Upstream business: Each power generation asset manages its own controllable cost. Energy efficiency is just one element of controllable costs. Downstream Business: Energy efficiency is one of the strategic subject areas for Uniper. The EU energy efficiency directive entered into force in December 2012 and was also part of our activities in 2017. Among other provisions, it obliges all energy distributors and energy retailers to achieve, between 2014 and 2020, annual savings of 1.5 percent on the amount of energy they sell to their customers. However, member states have the option of replacing this provision with alternative measures that achieve a comparable effect. The other provisions afford member states a similar degree of flexibility. Consequently, how the directive is transposed into national law is of significance and could pose risks for our regional units. Most member states transposed the directive into national law in 2014. Although the increasing efforts to enhance energy efficiency in all European energy markets create sales-volume risks for Uniper, they also create new sales opportunities by enlarging the market for energy-service businesses. In the UK for example the Uniper business is structured to deliver energy efficiency measures to our customers and as such therefore have dedicated budgets.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation
Product

Description of product/Group of products
Sythetic Natural Gas

Are these low-carbon product(s) or do they enable avoided emissions?
Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Low-Carbon Investment (LCI) Registry Taxonomy

% revenue from low carbon product(s) in the reporting year
0

Comment
Project Concept development: 2017. Opening ceremony of methanation plant: May 2018 Technical commissioning scheduled for July 2018. LCI Registry Taxonomy: Energy Storage – New Technologies that Increase Energy Storage Capacity.

Level of aggregation
Product

Description of product/Group of products
Liquefied Natural Gas for Trucks

Are these low-carbon product(s) or do they enable avoided emissions?
Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Low-Carbon Investment (LCI) Registry Taxonomy

% revenue from low carbon product(s) in the reporting year
0

Comment
Incentive of use of LNG as fuels for trucks through communication campaign and construction of filling stations.LCI Registry Taxonomy – Transport – Transport Logistics – Systems and Technologies that improve efficiency of vehicle and passanger movements.

Level of aggregation
Product

Description of product/Group of products
Electrolysis Hydrogen

Are these low-carbon product(s) or do they enable avoided emissions?
Low-carbon product

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Low-Carbon Investment (LCI) Registry Taxonomy

% revenue from low carbon product(s) in the reporting year
0

Comment
No business case as no willingness to pay for green hydrogen but we see this as an important topic. Highly depending on regulatory framework (e.g. subventions or mandatory use). LCI Registry Taxonomy

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Level of aggregation
Group of products

Description of product/Group of products
Hydroelectricity from HydroPower (Sweden) Hydroelectricity from Hydropower (Germany) Hydroelectricity from HydroPower(Austria) Nuclear power production (Sweden)

Are these low-carbon product(s) or do they enable avoided emissions?
Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (UBA Registry for Evidence of Origin)

% revenue from low carbon product(s) in the reporting year
100

Comment
We commercialize the corresponding certificates of origin.

Level of aggregation
Group of products

Description of product/Group of products
Service to optimise third party assets

Are these low-carbon product(s) or do they enable avoided emissions?
Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Low-Carbon Investment (LCI) Registry Taxonomy

% revenue from low carbon product(s) in the reporting year
0

Comment
Uniper is carrying out numerous activities to reduce the carbon footprint of industrial and municipal customers, by either process optimization, e.g. heat integration, or by supporting them as general planner to build cogeneration units. Furthermore, technical experts can help to reduce power consumption by planning the exchange of lighting installations or electrical drives. Studies to use solar heat generation or biomass as fuel have also been carried out.

C-EU4.6

(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your electricity generation activities.

Methane emissions from Uniper business can be categorized as follows:

1. CH4 release from losses of Natural Gas from Uniper Gas Storage Business. Natural Gas releases into the atmosphere as losses related to storage and pumping activities are inherent to the natural gas storage business. In the interest of the own business we make systematically our best efforts to minimize those releases. Methane releases can be classified into leaks, and process related releases for pipeline maintenance, repair or exchange measures. Leaks are repaired as soon as they are identified and leaked volumes can be only roughly estimated through mass balance. Initiatives to capture voluntary releases of Natural Gas are constantly being assessed against their financial viability. In the reported year, Uniper did not have methane reduction targets**.**

Already realized projects/ measures:

· New build of CHP (Bierwang: since 2016, Breitbrunn: since 2016, Epe: 2017) to use
→ methane emissions at low pressure level
→ Emissions from labyrinth seals of compressor units
for station baseload of energy and heat.

· Definition of closed relief areas to minimize vent gas (Epe 2017, Bierwang, 2016):

· Access points in process piping (Bierwang, since 2017)
→ possibility to route gas to CHP that is not directly connected

· Compressed air or nitrogen as replacement for methane actuator gas (Bierwang, 2017)

Upcoming projects/ measures

• Buffer piping
→ use of subsurface piping sections to buffer methane for further use in CHP

• Mobile GRMS to route high to low pressure gas usage

Compressed air as replacement for methane power gas (compressor start)

2. **CH4 release from combustion of fossil fuels in electricity generation assets**. This category corresponds to the residual methane released resulting from the combustion of each fuel and is calculated in Uniper's Carbon Footprint by multiplication of the fuel amounts by a valid (Greenhouse Gas Protocol) and updated fuel specific emission factor. Unipers business interest is to maximize the combustion efficiency as much as possible, nonetheless nothing can be technically done to reduce CH4 emissions of this residual amounts of CH4. **Example:** The combustion of 936.009.645 m3 of Natural gas in our ROCA plant in the Netherlands generated 296733 t CO2. This combustion process releases marginal amounts of CH4 and N2O, which are also considered greenhouse gases and for which a Global Warming Potential (GWP) is defined. In the case of CH4, the ratio of CO2 eq from CH4 (including GWP of 25) and the emitted CO2 is 0,00141, which means that for each ton of CO2 released 0,00141t COeq must be added due to the effect of the release of CH4.

3. **CH4 release from coal extraction**. Uniper business related coal extraction activities are undertaken by third parties which provide coal to Uniper for both commodity trading activities and combustion in our own assets. Uniper is member and co-funder of Better Coal and two of its board members are currently Uniper employees. Even though not all Uniper coal providers are Better Coal Suppliers, the assessment of this condition is part of Uniper´s due diligence process to select its coal providers and Uniper not only recognizes a competitive advantage when candidate providers are Better Coal Suppliers. Chapter 9.3 of the Better Coal Code refers to requirements to coal mining companies regarding emissions to air, including specific requirements to greenhouse gases. Quantification under recognized national standards, internationally recognized methodologies and good practices are part of these requirements, as well as procedures to minimize fugitive emissions from tailing facilities, waste dumps, stockpiles and other exposed areas.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2016

Base year end
December 31 2016

Base year emissions (metric tons CO2e)
72839561

Comment
Including EU ETS and Russian reporting scheme corporate emissions. Emissions also include N2O and CH4 equivalents from fuel combustion as well as other minor direct emissions from the activity. Updated emission factors obtained from valid sources (UBA and DEFRA)

Scope 2 (location-based)

Base year start
January 1 2016

Base year end
December 31 2016

Base year emissions (metric tons CO2e)
211288

Comment
Calculations based on grid emission factors of each of the relevant countries (UBA & DEFRA, 2015/2016)

Scope 2 (market-based)

Base year start
January 1 2016

Base year end
December 31 2016

Base year emissions (metric tons CO2e)
280035

Comment
Calculations based on residual mix emission factors of each of the relevant countries from the association of issuing bodies (2015)

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.
European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
Other, please specify (Russian Fed. Meth on Calculation of GHG)

C5.2a

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

Uniper reports most of its Scope 1 (direct) emissions under the EU-ETS (about 58.1% of Scope 1 emissions for 2017). Our plants in Russia account CO2 emissions according to the greenhouse gas emission monitoring and reporting methodology proposed by the federal government (affecting about 41.8% of Scope 1 emissions in 2017). In Russia (Uniper assets comprise 5 plants, 4 of them operating with natural gas and one with brown coal), the Russian Federation government offers a method to calculate CO2 emissions, but there is no obligation to report those as it is the case in Europe under the EU-ETS.

Other Scope 1 subcategories comprising significantly smaller emission amounts are not accounted under the above-mentioned schemes. Examples include N2O and CH4 released during fossil fuel combustion, released natural gas (mainly CH4) without combustion (for example pipeline maintenance/replacement procedures), as well as minor SF6 releases due to broken devices containing this gas, and emissions from owned mobile devices. Those emissions as well as Scope 2 emissions, are accounted under the principles and procedures of the Greenhouse Gas Protocol. Data sources and responsibilities are partially centralized and partially decentralized. Uniper is making use of simple IT platforms to collect most relevant data. Those platforms process and integrate emission data reliably.

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Row 1

Gross global Scope 1 emissions (metric tons CO2e)
63078563

End-year of reporting period
<Not Applicable>

Comment
2017 gross global scope 1 Emissions including ETS and Russian business emissions. Emissions also include N2O and CH4 equivalents from fuel combustion as well as other minor direct emissions. Uniper was created in 2016 - for this reason emissions before 2016 are not provided.

Row 2

Gross global Scope 1 emissions (metric tons CO2e)
72839561

End-year of reporting period
2016

Comment
2016 gross global scope 1 emissions. Adjustments were made to ensure consolidation method consistency (financial control) for 2016 and 2017; in 2016 emissions from Czech Rep. Plant Teplarna Tabor was added.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment
To know the relationship between the two approaches, Uniper has decided to calculate both. For location based approach, calculations were made using a calculation tool which includes valid Grid Emission Factors (UBA & DEFRA, 2015/2016). For market based approach calculations were based on the country specific residual mix emission factors from the ASSOCIATION OF ISSUING BODIES (2015) considering that no certified low carbon energy was purchased.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Row 1

Scope 2, location-based
253526

Scope 2, market-based (if applicable)
321548

End-year of reporting period
<Not Applicable>

Comment
2017 Scope 2 emissions. For location based approach, calculations were based on grid emission factors of each of the relevant countries (UBA & DEFRA, 2015/2016). For market based Scope 2 emissions calculations were based on residual mix emission factors of each of the relevant countries from the Associations of Issuing Bodies (2015).

Row 2

Scope 2, location-based
211288

Scope 2, market-based (if applicable)
280035

End-year of reporting period
2016

Comment
2016 Scope 2 emissions. For location based approach, calculations were based on grid emission factors of each of the relevant countries (UBA & DEFRA, 2015/2016). For market based Scope 2 emissions calculations were based on residual mix emission factors of each of the relevant countries from the Associations of Issuing Bodies (2015).

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?
No

C6.5

(C6.5) Account for your organization's Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Metric tonnes CO2e
811545

Emissions calculation methodology
GHG Protocol & DEFRA emissions factors consideration.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Explanation
The figures of the Scope 3 within this category include upstream emissions from purchased goods and services, fuels, as well as capital goods.

Capital goods

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
112976

Emissions calculation methodology
GHG Protocol & DEFRA emissions factors consideration.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Explanation
The emissions from "capital goods" are included in the previous category "purchased goods & services", since Uniper´s internal carbon reporting currently does not differentiate between these types of goods.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, calculated

Metric tonnes CO2e
17078477

Emissions calculation methodology
DEFRA emissions factors

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Explanation
This subcategory of emissions is relevant due to the high amounts of fuels Uniper requires for its generation processes. This category includes the subcategories defined by the Greenhouse Gas Protocol, which are integrated under Fuel-Energy-Related activities not already included in Scopes 1 and 2. Emission Factors used are specific to those subcategories and include National Grid Emission Factors, UBA Emission Factors, DEFRA Well -to-Tank (WTT) Emission Factors.

Upstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
All upstream transportantion related emissions are included in fuel and energy related activities (see above).

Waste generated in operations

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
Waste of operations corresponds basically to domestic waste, which GHG emissions are in no relation to other Scope 3 emissions.

Business travel

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
1382

Emissions calculation methodology
DEFRA and GHGP Emission Factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation
Airplane related emissions were provided by Uniper travel agency, through which business travels are booked. The agent provides a CO2 balance once a year on air travel.

Employee commuting

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
Uniper is working to define a methodology to calculate emissions from employee commuting based on an internal survey, nonetheless preliminary calculations assuming for all employees: 25 km distance to work, each employee driving a Diesel car consuming 1lt per 10 km for 220 days a year, would result in app. 32,000 t CO2.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
Uniper has not calculated its emissions from leased assets yet, but according to the amounts of assets and the relative emissions per employee for lighting and heating, emissions under this category are not relevant.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
Uniper does not offer services requiring downstream transportation and distribution. Trading of fuels an energy does not involve physical

Processing of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
As an energy provider, Uniper does not sell products which are further processed downstream

Use of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
21400097

Emissions calculation methodology
DEFRA

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Explanation
Gas and coal sales to end users fall under this category. In case of coal, process to differentiate between end user and resellers is ongoing. End user assumed in cases of doubts (conservative approach)

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
As an energy provider, Uniper does not sell products which could generate emissions under this category.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
Uniper has not calculated or estimated emissions from downstream leased assets so far. Only assets affected could be office buildings, which emissions are not relevant.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
Uniper does not work under the franchising business model. Not applicable.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation
There were no investments in new assets in 2017 which could generate emission under this category.

Other (upstream)

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

Other (downstream)

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

Percentage of emissions calculated using data obtained from suppliers or value chain partners

Explanation

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?
Yes

C6.7a

(C6.7a) Provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO2.
462713

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.00088

Metric numerator (Gross global combined Scope 1 and 2 emissions)
63400109

Metric denominator
unit total revenue

Metric denominator: Unit total
72238000000

Scope 2 figure used
Market-based

% change from previous year
19.4

Direction of change
Decreased

Reason for change
tCO2 per Euro based on overall sales. Variations in the trading business results regarding the own generation business explain variations in revenue related emissions. On the other hand, decomissioning of less efficient plants during 2017 in the Netherlands (Maasvlakte 1 and Maasvlakte 2) in combination with efficiency projects at individual plant or group of plats increases the overall efficiency, also in relation to the revenues. These activities are understood also as emission reduction activities at Uniper.

Intensity figure
0.51

Metric numerator (Gross global combined Scope 1 and 2 emissions)
63400109

Metric denominator
megawatt hour generated (MWh)

Metric denominator: Unit total
124276374

Scope 2 figure used
Market-based

% change from previous year
1

Direction of change
Increased

Reason for change
t CO2e per generated MWh, including Scope 1 and 2 emissions. Including also generation of heat plants (MWh electricity equivalents).

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	62378432	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	556213	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	399	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	143519	IPCC Fourth Assessment Report (AR4 - 100 year)

C-EU7.1b

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	20119	0.02	503375	CO2 equivalents only from fugitive CH4 and SF6 direct releases. CH4 emissions from combusted fuels are not included here as considered combusted.
Combustion (Electric utilities)	62487215	2129.5	0	62540452	CO2 equivalents only from direct CO2 and CH4, using GWP of 25. CO2 equivalents from N20 releases from combusted fuels not included
Combustion (Gas utilities)	0	0	0	0	Not Applicable
Combustion (Other)	34735	0	0	34735	Direct emissions from owned and leased vehicles.
Emissions not elsewhere classified					

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Germany	16030952
Russian Federation	26395976
United Kingdom of Great Britain and Northern Ireland	6756971
Netherlands	7927742
Sweden	9803
France	5092304
Hungary	751661
Czechia	113154

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Other Uniper	35003
Uniper Kraftwerke	15907391
Uniper UK PLC	6259028
Sydkraft Thermal Power AB	7405
Sydkraft Hydro Power AB	550
Uniper Benelux NV	7927240
Uniper France Power	5092304
Uniper Hungary Elektrikai Kft.	751661
OKG	1848
Unipro	26395976
Uniper Energy Storage DE	88558
Uniper Energy Storage UK	497943
Uniper Generation Belgium	502
Teplarna Tabor	113154

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility generation activities	63078563	<Not Applicable>	
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Germany	66441	104481	137720	0
Russian Federation	303	303	684	0
United Kingdom of Great Britain and Northern Ireland	94578	129939	266706	0
Netherlands	53151	76606	133227	0
Sweden	29778	3889	38831	0
France	7871	4854	131178	0
Hungary	475	561	1491	0
Czechia	929	915	1572	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Uniper Kraftwerke GmbH	65124	102450
Uniper UK plc	94569	129927
Sydkraft Thermal Power AB	12987	1734
Sydkraft Hydro Power AB	37	96
Uniper Benelux NV	53151	76606
Uniper France Power	7858	4846
Uniper Climate & Renewables France Solar	6	4
Uniper Energies Renouvelables S.A.S	6	4
Uniper Hungary Energetikai Kft.	475	561
OKG	16756	2059
Unipro	303	303
Uniper Wärme	305	430
Uniper Energy Storage DE	1011	1601
Uniper Energy Storage UK	9	12
Uniper Benelux Holding	0	0
Uniper Generation Belgium	0	0
Teplarna Tabor	929	915

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	
Other emissions reduction activities	63230	Decreased	0.1	Redustions linked to emission reduction measures as reported previously under 4.3 b . Avoided emissions due to Biomass operations not included for data consistency reasons. Calculation made on the basis of 2016 combined Scope 1 and 2 Emissions: (63230/72839561)*100= 0,086 or 0,1 app
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	6322585	Decreased	8.6	Total Scope I and Scope 2 (Market Method) CO2 equivalents were added for both years and compared. Result is the difference (%) between the emissions from 2017 and 2016 year. Adjustments were made to consider the financial control approach in both years. In 2017 Uniper's direct carbon emissions from the combustion of fossil fuels for power and heat generation declined mainly because of reduced generation in Russia and Germany and the increased use of gas rather than coal in the United Kingdom. (622585/72839561)*100=8,6
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	3333672	Decreased	4.5	Decommissioning of Maasvlakte Plants 1 and 2 in the Netherlands 3333672/72839561)*100=4,5

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 30% but less than or equal to 35%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	263034644.7	263034644.7
Consumption of purchased or acquired electricity	<Not Applicable>	0	761733	761733
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	0	263796377.7	263796377.7

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)
Natural Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
732749132

MWh fuel consumed for the self-generation of electricity
697577173

MWh fuel consumed for self-generation of heat
2198247

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
32973710

Fuels (excluding feedstocks)
Coal

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
88861322

MWh fuel consumed for the self-generation of electricity
22481914

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
6459639

Fuels (excluding feedstocks)
Lignite Coal

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
25252375

MWh fuel consumed for the self-generation of electricity
12651439

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
88861322

Fuels (excluding feedstocks)
Other, please specify (Biomass)

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
4511392

MWh fuel consumed for the self-generation of electricity
4511392

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Fuels (excluding feedstocks)
Gas Oil

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
1023003

MWh fuel consumed for the self-generation of electricity
24654

MWh fuel consumed for self-generation of heat
825154

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
172887

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Coal

Emission factor
2.23139

Unit
metric tons CO2 per metric ton

Emission factor source
Greenhouse gas reporting - Conversion factors 2017, https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017

Comment
CO2 Equivalents from combustion related CH4 and N2O releases calculated and accounted separately using CH4 and N2O emission factors from the same source

Gas Oil

Emission factor
3.19

Unit
metric tons CO2 per metric ton

Emission factor source
Greenhouse gas reporting - Conversion factors 2017, https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017

Comment
CO2 Equivalents from combustion related CH4 and N2O releases calculated and accounted separately using CH4 and N2O emission factors from the same source

Lignite Coal

Emission factor
1.9503

Unit
metric tons CO2 per m3

Emission factor source
Greenhouse gas reporting - Conversion factors 2017, https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017

Comment
CO2 Equivalents from combustion related CH4 and N2O releases calculated and accounted separately using CH4 and N2O emission factors from the same source

Natural Gas

Emission factor
0.00209

Unit
metric tons CO2 per m3

Emission factor source
Greenhouse gas reporting - Conversion factors 2017, https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017

Comment
CO2 Equivalents from combustion related CH4 and N2O releases calculated and accounted separately using CH4 and N2O emission factors from the same source

Other

Emission factor

Unit
Please select

Emission factor source

Comment

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	110860585		12585553	377560
Heat	5185627		0	0
Steam	3132215		0	0
Cooling	0	0	0	0

C-EU8.2e

(C-EU8.2e) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

Coal – hard

Nameplate capacity (MW)
8734

Gross electricity generation (GWh)
24042

Net electricity generation (GWh)
23007

Absolute scope 1 emissions (metric tons CO2e)
20739750

Scope 1 emissions intensity (metric tons CO2e per GWh)
901

Comment
Only electricity generation considered (co-generation excluded).

Lignite

Nameplate capacity (MW)
3419

Gross electricity generation (GWh)
12094

Net electricity generation (GWh)
11574

Absolute scope 1 emissions (metric tons CO2e)
11870848

Scope 1 emissions intensity (metric tons CO2e per GWh)
974

Comment
Only electricity generation considered (cogeneration excluded).

Oil

Nameplate capacity (MW)
840

Gross electricity generation (GWh)
38

Net electricity generation (GWh)
36

Absolute scope 1 emissions (metric tons CO2e)
50560

Scope 1 emissions intensity (metric tons CO2e per GWh)
1404

Comment
Only electricity generation considered (cogeneration excluded).

Gas

Nameplate capacity (MW)
18244

Gross electricity generation (GWh)
65751

Net electricity generation (GWh)
63223

Absolute scope 1 emissions (metric tons CO2e)
29665630

Scope 1 emissions intensity (metric tons CO2e per GWh)
464

Comment
Only electricity generation considered (cogeneration excluded).

Biomass

Nameplate capacity (MW)
1270

Gross electricity generation (GWh)
1289

Net electricity generation (GWh)
1238

Absolute scope 1 emissions (metric tons CO2e)
462713

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Includes both Provence 4 and Maasvlakte 3 (Co-Combustion of Coal and Biomass power plants).

Waste (non-biomass)

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
No Waste combusted except waste biomass, which is already considered under biomass.

Nuclear

Nameplate capacity (MW)
2603

Gross electricity generation (GWh)
11559

Net electricity generation (GWh)
11088

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Geothermal

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
No geothermal facilities

Hydroelectric

Nameplate capacity (MW)
1198

Gross electricity generation (GWh)
12961

Net electricity generation (GWh)
12585

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Gross generation estimated

Wind

Nameplate capacity (MW)
83

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Solar

Nameplate capacity (MW)
10

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment

Other renewable

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Other non-renewable

Nameplate capacity (MW)

Gross electricity generation (GWh)

Net electricity generation (GWh)

Absolute scope 1 emissions (metric tons CO2e)

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

Total

Nameplate capacity (MW)
36401

Gross electricity generation (GWh)
127734

Net electricity generation (GWh)
122751

Absolute scope 1 emissions (metric tons CO2e)
62789501

Scope 1 emissions intensity (metric tons CO2e per GWh)

Comment

C8.2f

(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.

Basis for applying a low-carbon emission factor
No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor

Low-carbon technology type
<Not Applicable>

MWh consumed associated with low-carbon electricity, heat, steam or cooling
<Not Applicable>

Emission factor (in units of metric tons CO2e per MWh)
<Not Applicable>

Comment
No low-carbon energy purchased. Market based Scope 2 calculation was made therefore using residual mix emission factors and the result was accordingly higher than for the location based method.

C-EU8.4

(C-EU8.4) Does your electric utility organization have a global transmission and distribution business?
No

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-EU9.5a

(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment
Coal – hard	499710000	26	2020	Segment generation and international power. Other inverstments as IT investments, innovation projects, engineering Capex not included.
Lignite	543740000	29	2020	Segment generation and international power. Other inverstments as IT investments, innovation projects, engineering Capex not included.
Oil	6820000	0	2020	Segment generation and international power. Other inverstments as IT investments, innovation projects, engineering Capex not included.
Gas	435860000	23	2020	Segment generation and international power. Other inverstments as IT investments, innovation projects, engineering Capex not included.
Biomass	64000000	3	2020	Segment generation and international power. Other inverstments as IT investments, innovation projects, engineering Capex not included.
Waste (non-biomass)	2300000	0	2020	Segment generation and international power. Other inverstments as IT investments, innovation projects, engineering Capex not included.
Nuclear	165700000	9	2020	Segment generation and international power. Other inverstments as IT investments, innovation projects, engineering Capex not included.
Hydroelectric	188280000	10	2020	Segment generation and international power. Other inverstments as IT investments, innovation projects, engineering Capex not included.

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan

C-CO9.6/C-EU9.6/C-OG9.6

(C-CO9.6/C-EU9.6/C-OG9.6) Disclose your investments in low-carbon research and development (R&D), equipment, products, and services.

Investment start date
January 1 2017

Investment end date
December 31 2017

Investment area
Equipment

Technology area
Infrastructure

Investment maturity
Small scale commercial deployment

Investment figure

Low-carbon investment percentage

Please explain
LIQVIS: this Uniper subsidiary develops LNG terminals and tanking systems for the transportation and logistic sectors. With LNG´s significantly improved climate performance (trough decreased CO2 emissions) and lower costs in regard to Diesel, through this business LIQVIS expects to have a role in the energy transition to a low carbon economy.

Investment start date
January 1 2017

Investment end date
December 31 2017

Investment area
Products

Technology area
Energy storage

Investment maturity
Pilot demonstration

Investment figure

Low-carbon investment percentage

Please explain
STORE&GO Falkenhagen Synthetic Natural Gas. (18M€ EU funding, 1.5M€ Uniper part) This initiative allows the CO2-free production of hydrogen via alkaline electrolysis using 100% renewable (wind or solar) energy. Produced hydrogen can be directly used, injected into the natural gas pipelines or further transformed into synthetic methane gas vía methanation, for which CO2 is added. Decoupling the energy from its renewable sources contributes to solve the issue of security of supply from those sources. Methanation Plant: - Full load capacity :57 Nm3/h - Full load hours: 2000 p.a. - 114000Nm3 p.a. - Natural Gas would otherwise emit 228 t CO2. Project consortium consists of 28 members across Europe.No commercial project, but technical demonstration. Methanation plant in Falkenhagen will be operated for 2 years; after test operation it will be decided, whether plant will be further operated or decommissioned. Investment includes support from the European Union.

Investment start date
January 1 2017

Investment end date
December 31 2017

Investment area
R&D

Technology area
Carbon capture and storage/utilisation

Investment maturity
Applied research and development

Investment figure

Low-carbon investment percentage

Please explain
“ECO2”: Last Lab analysis of this initiative ongoing and modellations are taking place in Wilhelmshaven, leaded by Uniper´s partners University of Oldenburg and IUTA. Efficiency and amounts of CO2 to be reduced are still to be defined. Final report to be made available in Aug/Sep 2018. Project cofinanced by AiF.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.

Scope
Scope 1

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
PWC 2017 NFR Assurance Statement.pdf

Page/ section reference
Page 3: “Urteil”

Relevant standard
European Union Emissions Trading System (EU ETS)

*European Union Emissions Trading System (EU ETS) and Greenhouse Gas Protocol. Verified by independent third party (GutCert) and assured by an independent third party (PWC). Attached is the statement of the latest. EU-ETS Asset specific verifications can be confirmed online at the EU-ETS Union Registry Transaction Log under: http://ec.europa.eu/environment/ets/oha.do?form=oha&languageCode=en&account.registryCodes=DE&accountHolder=*Uniper*&installationIdentifier=&installationName=&permitIdentifier=&mainActivityType=-1&search=Search&searchType=oha&currentSortSettings=*

Proportion of reported emissions verified (%)
57

Scope
Scope 1

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
PWC 2017 NFR Assurance Statement.pdf

Page/ section reference
Page 3: “Urteil”

Relevant standard
Other, please specify (Russian Fed. Calc Meth for GHG)

Calculation Method proposed by the Russian Federation government and applied by the Unioper national CO2 coordinator (NCC)/ Greenhouse Gas Protocol. Verified by independent third party (PWC) in the frame of compliance non-financial reporting.

Proportion of reported emissions verified (%)
42

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS

UK carbon price floor

C11.1b

(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.

EU ETS

% of Scope 1 emissions covered by the ETS

57.2

Period start date

January 1 2017

Period end date

December 31 2017

Allowances allocated

687497

Allowances purchased

35506319

Verified emissions in metric tons CO2e

36193816

Details of ownership

Facilities we own and operate

Comment

C11.1c

(C11.1c) Complete the following table for each of the tax systems in which you participate.

UK carbon price floor

Period start date

January 1 2017

Period end date

December 31 2017

% of emissions covered by tax

10.2

Total cost of tax paid

113811342

Comment

Amount in Euro. Percentage was calculated based on total corporate direct CO2 emissions from operations (i.e. fuel combustion) only.

C11.1d

(C11.1d) What is your strategy for complying with the systems in which you participate or anticipate participating?

Uniper supports any CO2 regulation system that is market oriented. Currently Uniper must participate in e.g. the UK carbon price floor and the EU ETS by law. Therefore, Uniper´s installations comply with the system by obeying its underlying rules and regulations. Since Uniper manages CO2 like any other commodity such as coal or gas we develop e.g. a hatching strategy to minimize CO2 market risk and to maximize the contribution of this commodity to Uniper´s performance. For coal and gas fire plants is calculated with market price for the certificates. This allows for a short-term decision process; which kind of power station is dispatched to fulfil the demand of power. The stocking of certificates for generation is planned centrally. We have integrated carbon risk into our operational decision making for projects. All projects that fall within the requirements of the EU ETS have a financial assessment based on their future emissions which informs the business on the most profitable option.

On the operational side, we created the Uniper Competence Service Center CO2 to serve as our central entity for collecting and managing data relating to carbon emissions and EUAs. This improves the quality of our planning and make our participation in the ETS more efficient. Uniper has documented processes to ensure compliance with the EU ETS. Moreover, Uniper has trained personnel both at site and group (centralized) level, thus ensuring a high quality MRV system.

To be politically and financially viable, the strategies for achieving climate related objectives require a stable investment framework. Such strategies will involve capital-intensive assets with operating lives lasting several decades. To have the confidence to operate such assets, energy companies like Uniper need a consistent, predictable policy and regulatory environment. To assist us in our decision-making, we discussed scenarios reflecting assumptions about carbon prices levels (e.g. carbon allowances may become scarcer, resulting in higher carbon prices) and other future developments in energy markets. In this way, climate protection is factored into our planning, investment decisions, and risk management.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit purchase

Project type

Other, please specify (Unidentified secondary market CERs)

No project tracking, as credits (CERs) purchased on secondary market

Project identification

No project tracking, as credits (CERs) purchased on secondary market

Verified to which standard

CDM (Clean Development Mechanism)

Number of credits (metric tonnes CO2e)

450000

Number of credits (metric tonnes CO2e): Risk adjusted volume

450000

Credits cancelled

Yes

Purpose, e.g. compliance

Compliance

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price
Navigate GHG regulations

GHG Scope
Scope 1

Application
Uniper commodity Outlook EUA prices included in investment decisions

Actual price(s) used (Currency /metric ton)

Variance of price(s) used
Evolutinary pricing

Type of internal carbon price
Shadow price

Impact & implication
The applied Uniper internal carbon price is derived from the future commodity outlook which forecasts EUA prices based on fundamental market factors. In the context of the Uniper asset fleet strategy, this price is used to make judgements on future power plant investments. No new coal plants to be invested in (strategic announcement).

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, our customers

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Compliance & onboarding

Details of engagement
Climate change is integrated into supplier evaluation processes

% of suppliers by number
1

% total procurement spend (direct and indirect)
1

% Scope 3 emissions as reported in C6.5
0

Rationale for the coverage of your engagement
Ensuring environmentally sustainable processes

Impact of engagement, including measures of success
Reducing legal and reputational risks associated to procurement.

Comment
Example: In the procurement of imported biomass Uniper requires FSC, PEFC and SBP certifications from providers to ensure legality and sustainable extraction as well as management of the resource.

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement
Collect climate change and carbon information at least annually from suppliers

% of suppliers by number
1

% total procurement spend (direct and indirect)
0

% Scope 3 emissions as reported in C6.5
0

Rationale for the coverage of your engagement
To have a detailed overview of Scope 3 Emissions related to our business. Uniper has just closed the process of identifying relevant Scope 3 emissions following the GHGProtocol, which started in 2016. Next step is the corresponding emissions accountability and inclusion in our annual Sustainability Report. Even though no suppliers are involved so far, climate responsibility criteria will be included in supplier selection criteria in order to promote emission reductions along our supply chain.

Impact of engagement, including measures of success
Increasing our awareness on relative relevance of Scope 3 Emissions

Comment
Uniper is starting to identify the relevance of its Scope 3 Emissions. An important proportion of those are related to logistics of fuels and sales of fuels to end users as commodities. Identifying relevant scope 3 categories allow Uniper to set priorities regarding climate related requirements to providers

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C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement
Education/information sharing

Details of engagement
Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

Size of engagement
50

% Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
Reducing peak time electricity consumptions by clients, thus destressing the supply side and thus benefitting from tariff reductions defined by law

Impact of engagement, including measures of success
Campaign to let the customers understand the economic benefits of changing their electricity consumption behaviour resulting in increased energy efficiency and reduced electricity tariffs according to legal incentives. Accurate estimation of impact of the measure as % of Scope 3 extremely difficult.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers
Trade associations
Funding research organizations
Other

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Cap and trade	Support	Uniper very clearly supports a strengthening of the EU-ETS. This has been addressed by speeches and talks with politicians as well as journalists by our Political Affairs team.	Permanent proposals of improvements of the EU-ETS mechanisms in our condition as user.
Cap and trade	Support	Indirect engagement in discussions on CO2 price stability mechanisms (Backloading and Market Stability Reserve)	Implementation of Backloading and Market Stability Reserve Mechanisms by the European Comission.
Energy efficiency	Support	Issue is addressed in speeches and talks by the CEO and other senior executives.	The market driven development is supported by a strengthened European Emissions Trading Scheme that should become the leading instrument to address climate change.
Other, please specify (Coal Phase Out)	Support with major exceptions	Germany: general support for establishment of coal commission. Await outcome of coal commission. NL: Proposed phase-out until 2030 only if Uniper is compensated for losses	Germany: No proposals so far.
Other, please specify (Support of Renewable Energy)	Support with minor exceptions	Support market oriented reforms via EFET	No specific proposals
Other, please specify (Implementation of Energy Efficiency Laws)	Support	none	none
Other, please specify (BREF)	Support	Support efficient approach via BDI	None so far

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association
Eurelectric

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Acknowledge the 2°C limit and set an EU Climate Change target for 2030.

How have you, or are you attempting to, influence the position?
Indirect. Membership through national associations (i.e. Energie-Nederland, Energy UK)

Trade association
EFET

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Acknowledge the 2°C limit and set an EU Climate Change target for 2030.

How have you, or are you attempting to, influence the position?
Directly as regular member

Trade association
BDI

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Acknowledge the 2°C limit and set an EU Climate Change target for 2030. Support German Energy Transition.

How have you, or are you attempting to, influence the position?
Indirect through an association.

Trade association
CO2Reuse

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Development of CCU processes

How have you, or are you attempting to, influence the position?
Directly as regular member

Trade association
CO2 Value Europe

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Development of CCU processes

How have you, or are you attempting to, influence the position?
Directly, own professional is president of the board

Trade association
IETA

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Build international policy and market frameworks for reducing greenhouse gases at lowest cost.

How have you, or are you attempting to, influence the position?
Regular Member

Trade association
Working Group Emission Trading at BMU

Is your position on climate change consistent with theirs?
Consistent

Please explain the trade association's position
Space for discussion and assessment of topics related to Emission Trading and Carbon Markets, also in the context of climate policy packages, aiming to make proposals for increasing robustness of the instruments.

How have you, or are you attempting to, influence the position?
Directly as regular member

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?
Yes

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

Uniper's memberships shows key associations and initiatives that may be directly or indirectly related to our material sustainability topics, including climate change. The membership of these associations and initiatives can be highly diverse, and it is not always possible to assign them unequivocally to individual sustainability topics. Nevertheless, these memberships are fundamentally relevant to our sustainability efforts.

Uniper's memberships in key associations and initiatives in 2017 were following:

Gas/Gas Storage

- Zukunft ERDGAS e. V. (Germany): Associationrepresentating of product Natural Gas and counterpart for users, politics and market partners. Voluntary membership.

- Eurogas (Europe, global): Association representing the European gas wholesale, retail and distribution sectors towards the EU institutions. Voluntary membership.

- INES – Initiative Erdgasspeicher [Gas Storage Initiative] (Germany): Association of natural gas storage operators in Germany. Voluntary membership.

- International Gas Union (IGU) (global): Worldwide non-profit association advocating gas as an integral part of a sustainable global energy system and to promote the political, technical and economic progress of the gas industry. Voluntary membership.

Coal:

- Bettercoal (global): association for a responsible coal supply chain established by a group of coal buyers to promote continuous improvement of sustainability performance in their coal supply chain. Voluntary membership.

- Coal Industry Advisory Board (CIAB) (global): group of high level executives from coal-related industrial enterprises established by the IEA to provide advice to the IEA on a wide range of issues related to coal. Voluntary membership.

- Verein der Kohleimporteure (VdKi) [Association of Coal Importers] (Germany): represents the political and commercial interests of coal importers. Voluntary membership.

Technology:

- VGB PowerTech e.V. (Europe): international technical association for generation and storage of power and heat. Voluntary membership.

- AGFW E.V.: Association for Energy-Efficient Heat, Cooling, and Cogeneration. Voluntary membership.

- Hydrogen Europe (Europe): European hydrogen and fuel cell association. Voluntary membership.

Climate Protection:

- DVGW -Deutscher Verein des Gas- und Wasserfaches e.V.(Germany): Standardization body for the gas and water industry, centre for technical and scientific know-how in the gas and water sectors and initiator and promoter of research projects and innovations.

- CO2 Value Europe (Europe): industry-driven European association representing CO2 utilization community at European level, building an integrated vision and action plan to develop CO2 utilization.

- EnerChain P2P Trading Project (Europe): Blockchain based distributed ledger capable of covering the entire trade cycle. Voluntary membership.

- SBP – Sustainable Biomass Program (global): sustainability certification system designed for woody biomass (pellets or wood chips) used in the large-scale energy production. Voluntary membership.

- IETA (Europe): non-profit organization to serve businesses engaged in the field of carbon markets, with the objecvtive to to build international policy and market frameworks for reducing greenhouse gases at lowest price. Voluntary membership.

- Innovationsforum Energiewende (Germany): forum for stakeholders from the energy sector to discuss on options for a cost-effective energy transition.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Energy supply is a heavily regulated business and is the subject of extensive political debate, particularly with regard to climate protection. Europe's commitment to climate protection is fundamentally altering its energy supply system. To meet these challenges, we need a policy and regulatory environment that enables us to take action that makes business and environmental sense. Adequate representation of our business interests is essential for the successful operation of our assets and for our strategic prospects.

We conduct an intensive dialog with a variety of external stakeholders, such as government entities, political parties, regulatory agencies, and trade associations. This dialog is crucial for us to communicate openly and transparently with representatives of political parties and institutions and to explain our positions. As an example, Uniper uses the "Uniper in Dialog" format to engage in stakeholder discussions at, for example, party conventions in Germany to answer questions about our business activities. We're committed to keeping activities in advocacy groups transparent at all times. This is the only way to avoid the suspicion of undue influence on policymaking and to prevent damage to our reputation.

Uniper has effective organizational structures & assigned roles & responsibilities based on the principles of good corporate governance. We promote a constructive, proactive & transparent bi-lateral dialog with our stakeholders. Our primary considerations in designing our sustainability strategy are to identify which aspects influence shareholder value & ensure the long-term stability of our business. We focus on material aspects: those that are highly relevant for Uniper & for our external & internal stakeholders. Material aspects have a significant direct or indirect impact on the key drivers of value creation at Uniper. We count with government & regulatory support mechanisms to facilitate the implementation of these programmes & help achieve the global targets. Our updated Stakeholder Management Policy establishes clear rules for our participation in political decision-making processes & the open, consistent topical interaction with our stakeholders. It sets standards for the information we convey & delineates responsibilities, processes, & mechanisms. These include rules regarding the transparent management of information & policy dialog by Uniper government affairs staff, prohibiting the release or distribution of wrong, misleading or excessively selective information, taking immediate action if those releases occur. Our policy also contains additions to sustainability management & communication. It specifically guides the tasks & responsibilities of Group management, as well as our global & regional business units. All processes related to climate change are steered by corporate strategy, political affairs, communications & HSSE & Sustainability. In relation to Climate our management mechanisms are driven through the close coordination of corporate strategy, lobbying, stakeholder management, power plant planning & the sustainability work program. As part of our general performance we organize multidisciplinary HSSE meetings with our Group-wide Management Units: Climate Change as part of the environmental subject which delivers to our Sustainability performance is one of the issues systematically raised in it.

Uniper is committed to a transparent exchange with citizens, EU institutions and governments of the countries Uniper operates. Uniper joined the EU Transparency Register for organizations & self-employed individuals influencing EU policymaking & implementation. We are also signatory members to the Code of Conduct it contains. We authorize our representatives through the EU Parliament's accreditation process for lobbyists. Uniper complies with European & national laws of the countries where we operate, as well as with the applicable rules for participating in committees & public policy working groups. We contribute our expert knowledge to legislative decision-making processes and do so transparently for our stakeholders. We focus primarily on energy, environmental & climate policy. Examples include:

- Discussions on overarching topics such as the review of EU Climate Targets to 2030,

- Regulation on Wholesale Energy Market Integrity & Transparency (REMIT) & the harmonization of electricity transmission tariff mechanisms - the latter especially within the framework of the dialog process initiated by the Agency for the Cooperation of Energy Regulators (ACER),

- Discussions on measures to stabilize CO2 price (Backloading and Market Stability Reserve for the EU-ETS),

- Debate of the gas supply security: This has a high priority both for EU legislators & members,

- Contribution to discussions on technological standards (e.g. BREF),

- Discussion on Coal Phase-Out, Renewable Energy and Energy Efficiency promotion

- Debates on introduction of capacity market mechanisms

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In mainstream reports

Status
Complete

Attach the document
20180308_FY2017_Annual_Report.pdf

Content elements
Governance
Strategy
Emissions figures
Other, please specify (Political & Regulatory Environment)

Publication
In voluntary communications

Status
Complete

Attach the document
Klimawandel.pdf

Content elements
Risks & opportunities
Emissions figures
Other, please specify (Climate Related Commitments)

Publication
In voluntary communications

Status
Complete

Attach the document
Governance und Nachhaltigkeits.pdf

Content elements
Governance
Strategy
Other, please specify (Climate Related Commitments)

Publication
In voluntary communications

Status
Complete

Attach the document
16-17 Direct CO2 Emissions Reported Online.pdf

Content elements
Emissions figures

C14. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

Disclaimer

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Suggestion

Uniper has noticed some minor content differences between the formats available for the answering process. Uniper would welcome a guarantee of content consistency between the different formats aiming to avoid unnecessary spend of resources (in case of less requirements in ORS than in other formats) or last minute answers (in case ORS includes additional requests to other formats).

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Operating Officer (COO)	Chief Operating Officer (COO)

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

Please confirm below
I have read and accept the applicable Terms