



# Ready to SOAR HIGH

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Sustainability Report  
2016-17 & 2017-18

GRI-G4  
Aligned





# Ready to **SOAR HIGH**

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**Sustainability Report**  
2016-17 & 2017-18

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# OPGC and Sustainability

Years 2016 and 2017 had been eventful for all of us at OPGC. We moved resolutely towards our goal of concluding the capacity expansion project – an ambitious journey that started in 2014. We bolstered our organizational strength and strengthened our business strategy. In short, we solidly got ready and set our course for soaring high in future. Throughout this process, we sincerely engaged with everyone who makes OPGC what it is: our employees, shareholders, suppliers, the government and neighbouring communities. All of them have been crucial to our success in these two years and which motivates us to continue to keep them engaged at a even higher level. For them as well as for regulators, policymakers and the general populace as consumers of energy that we produce, OPGC would constantly strive to remain a reliable, responsive and transparent partner.

The energy world is changing. Renewables are essential for reducing global carbon emissions and limiting climate change. But renewable production fluctuates, and the options currently available for storing renewable energy are limited. OPGC is ready to play its role in meeting these challenges: our modern, flexible and efficient power plants and our long-term coal supply arrangements safeguard the energy supply when the sun isn't shining and the wind isn't blowing. Security of supply is an increasingly urgent issue in the years ahead. Energy demand is growing in India and particularly in the State of Odisha where OPGC is a leading power producer. Going forward, coal in particular will play a key role by partnering with renewables to meet the State's energy demand. The global trends fit well with our strategy of focusing on growth of our present business capacity which is set to grow four-fold very soon.



**Indranil Dutta**  
Managing Director

We believe that our business activities can help tackle global challenges such as access to energy, climate change, human development, and support for community level innovation and critical infrastructure development for enrichment of lives. For this reason, we align our work with the United Nations Sustainable Development Goals (SDGs) or Global Goals as an important framework for contributing to as well as for measuring progress. As a business, we have been working on developing long-term resilience by implementing a dedicated Sustainability Strategy plan.



## OPGC's Sustainability Strategy Implementation Process

Broadly developed out of the Global Goals and our business strategies, it consists of a set of short and long-term commitments that guide our activities and our action plans to address key sustainability issues that are material to us.

In order to improve the living conditions in our peripheral villages we have been constantly engaging with the communities and other stakeholders including Non Governmental Organisations (NGO) towards implementation of key interventions. Of course, we are aware that we have a responsibility not only towards people but also to our environment. In the two

years of reporting, we continued to reduce emissions from our plant. Carbon emissions decreased as well. We are deeply focused on further limiting our climate impact while we continue to provide a secure and reliable energy supply.

I'm pleased to present OPGC's new Sustainability Report – the third one published so far. We hope you find this report useful and informative. We are hopeful that you would continue to support as well as accompany us on our journey towards reaching higher altitudes of collective success.

**Indranil Dutta**

# OPGC's Sustainability Vision

OPGC's sustainability vision and strategy are operationally led by Director-Operations of the Company Mr. Alok Mukherjee. He is the champion of sustainability initiatives of the company and heads the Sustainability Strategy Group. In his conversation with Dr. Manoj Dash, Head-CSR and Sustainability of OPGC, Mr. Mukherjee details the sustainability vision of the organisation.



**Mr. Alok Mukherjee** in conversation with **Dr. Manoj Dash** detailing the sustainability vision of OPGC

As a responsible electricity producer, OPGC Ltd. consistently delivers long-term societal value by operating in an economically, environmentally and socially sustainable manner that is recognized as a model in the ecosystem we operate.

Our approach to sustainability, and our business in general, remains one where we prioritize people and the environment over profitability: the safety and health of our employees, contractors and those directly or indirectly involved in our operations is placed above all else.

OPGC's sustainability report is our way of communicating how we identify the economic, environmental and social impacts of our operations, and how we integrate their associated opportunities and risks into our business strategies. Over time, our reporting activities are helping us to realize our sustainability vision.

We understand our moral and legal duty to operate in a manner that protects the health and safety of our people and communities, provides responsible stewardship over the environment, and treats our people, partners and suppliers respectfully and fairly.

From the landowners with whom we share the landscape, to the families and businesses that rely on power to fuel their daily needs, our activities have potential effects on a wide range of stakeholders who expect OPGC to deliver consistently strong financial results in a responsible and ethical way.

**These expectations align economic success with every element of our sustainability commitments, and have led us to prioritize our objectives in the following order:**

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**a.** The safety and health of our employees and those involved directly or indirectly in our operations. Nothing is more important.

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**b.** Our responsibility is to protect the environment. We continually seek improved environmental performance in our operations.

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**c.** Economic success through a focus on operational excellence across our business, which includes technical and process excellence, efficiency, expertise and stakeholder relations.

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**d.** Social development around our plant site through a number of interventions spanning health, education, skill development, income generation, water & sanitation and community infrastructure.

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**We believe the above priorities generally do not conflict with each other, because business that is conducted in the safest and cleanest manner is also most likely to be the most profitable way to do business over the long term. In instances where these priorities may be in conflict, we instruct our employees that the health and safety of people, the protection of the environment and addressing community's development concerns must always take priority over profitability.**

**Note** - Queries related to this report may be sent to: [sustainability@opgc.co.in](mailto:sustainability@opgc.co.in)



# Our Strategic Approach

## Local acceptance through engagement

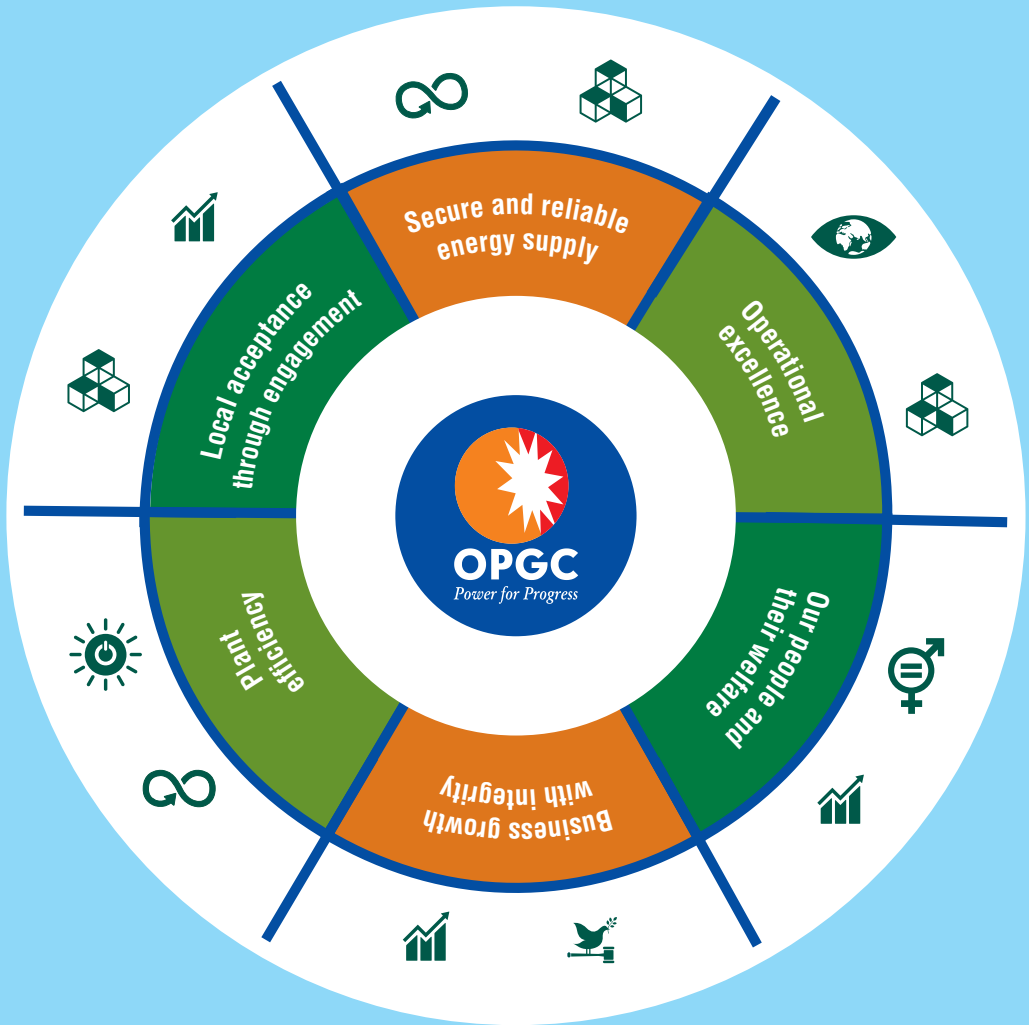
How do we minimize social and environmental impacts on the communities where we operate?

## Secure and reliable energy supply

How do we provide essential energy services without interruption in a changing and complex energy ecosystem?

## Operational excellence

How do we enhance growth through excellent operational practices while addressing different environmental risks in our value chain?



## Plant efficiency

How do we reduce the waste of natural capital in our value chain?

## Business growth with integrity

How do we act responsibly with regard to compliance, human rights, transparency and accountability?

## Our people and their welfare

How do we attract and retain a diverse and motivated workforce and ensure a healthy and safe work environment?

# Highlights of Our Sustainability Strategy

## What are our sustainability aspirations?

We are committed to live sustainability – this is one of our corporate values. As a sustainable business, OPGC aims to pioneer new solutions while developing our business responsibly and increasing our economic success.

## What strategy are we pursuing?

Our ambition is to achieve more with less. This means we create more value for our stakeholders in different ways – at a responsible environmental footprint.

## What are our priorities for the coming years?

### Strengthen foundation

We already have a strong foundation with a successful track record. On the road to our long-term goal, we intend to further improve our performance over the coming years.

### Boost engagement

We want to further develop and foster the commitment of our employees to sustainability. Our employees make the difference – with their dedication, skills and knowledge.

### Maximize impact

We want to strengthen our contributions to addressing major business challenges and maximize the impact on key stakeholders we can achieve with our operations, brands and technologies.

## OPGC's Sustainability Focus



We concentrate our activities along these focal areas that reflect the challenges of sustainable development as they directly relate to boost our operational excellence.



Mass safety tool box talk to create safety awareness during annual overhauling

# Our Business

As an electricity generator, our business model is to create value for our customers, employees, shareholders and society in general. For a sustainable business model to succeed, value cannot only include monetary means, but must encompass environmental concern, social responsibility, employee-related matters, respect for human rights and anti-corruption. Responsible business is a means for remaining successful in a changing global environment.

We build trusted relationships through our strong engagement with both customers and society and through our broad expertise in the power sector.

As a company, we contribute to progress in society and sustainable development by making it easier for people to realise their dreams. We work for something greater than the business and our customer, employees and shareholders – we work for a greater good, delivering value and generating positive impact

on society. By measuring the output of our resources, not just in terms of results, but of impact we can also show how we create human, social, environmental and perpetual value alongside economic value.

Our business strategy is designed to support delivery of value to all our stakeholders. Having a simple operating model and an end-to-end value chain ensure appropriate and optimal delivery of commitments.

## OPGC is the leading power producer in the Odisha State of India

For a sustainable business model to succeed, our value creation approach doesn't only include monetary means, but also Environmental, Social and Governance (ESG) factors.

As a power generator, we contribute to the development of communities, other industries, enriching lives of power consumers, to lead a better life.

### Vision

A world class power utility committed to generate clean, safe and reliable power, enhancing value for all stakeholders and contributing to national growth

### Values

Safety  
Commitments  
Integrity  
Excellence  
Organizational Pride  
Teamwork

#### Our sustainable operations

- Know Your Stakeholders (KYS)
- Safety analysis
- Responsible governance
- Adequate green cover
- ESG screening of suppliers
- IT development to suit operational excellence
- Business transformation



#### Financial

**INR 6232** million revenue

**INR 479** million Profit After Tax



#### Human

**431 employees**

96% men, 4% women



#### Social and Relationship

**50000** Beneficiaries  
50 neighbourhood villages  
Stakeholders, suppliers, NGOs, other decision-makers  
Our brand and reputation.



#### Intellectual

- Integration of sustainability within our core business
- Risk and compliance
- Vision and values
- Information Technology systems and processes



#### Natural

- Energy
- Forest Cover
- Water

## The Future Ahead

OPGC's present operational plant has two units of 210 Megawatt each which became operational in 1994 and 1996 respectively. The plant is adjudged the best among the State Sector thermal power plants in India in terms of Plant Load Factor (PLF) whereas it is among the top ten in India among all thermal power plants – Central, State and Private.

The operational plant is ageing fast and its revenue generation capacity along with its profit have started nosediving. In addition, it requires massive investment for its modernisation and upkeep to keep pace with changing regulatory requirements. The plant is regarded among the best run in India viewed from environmental and social angles.

For the last two decades it has always been profitable and profits kept rising each succeeding year until a couple of years ago. Profits started plummeting due to ageing of the plant, coal quality issues, regulatory changes, etc. Keeping this in view the shareholders of

OPGC – Govt. of Odisha and AES Corporation – decided about four years ago to move for capacity expansion to meet the energy needs of Odisha as well as to address the issues of growth in revenue and profits.

As a result, two units of super critical coal based power generation units of 660 Megawatt each have come and are ready to start production in the first quarter of 2019. All necessary ingredients are firmly in place including dedicated coal supply and Power Purchase Agreement (PPA).

**The growth in terms of generation capacity is set to jump four times from 420 Megawatt to 1740 Megawatt.** The projected revenue growth is estimated to quadruple and the profits are set to jump by at least six times in the first year of generation after start of commercial operation of the new super critical units.

This would be a significant surge in growth and this would be achieved while keeping our sustainability strategies and drives well in place.



The new 1320 Megawatt plant is in the front while the 420 Megawatt old plant is visible on its back

# Powering Economic Growth

The energy we produce helps power economic growth and improve the quality of life for millions of people in Odisha.

We make a significant contribution to people, industries and communities around Odisha, providing light and power for business and industry.

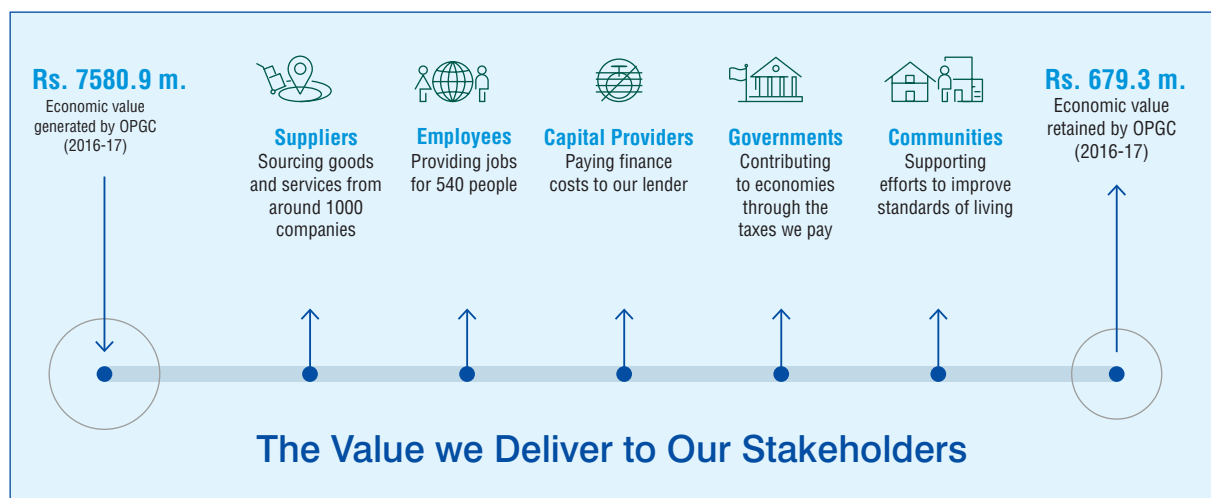
We enable the distribution companies to grow their domestic supplies of energy and boost their energy security.

This, in turn, creates jobs, drives economic development and generates revenue for the Government of Odisha.

In the year 2016-17 revenue grew to a record level of Rs. 7580.9 million from the previous

year's level of Rs. 7059.5 million. However, in 2017-18 it fell to Rs. 6231.2 million due to fall in the quality of coal, adverse tariff regulation by the electricity regulator and ageing of the plant.

During the year 2016-17 the economic value retained by OPGC was Rs. 679.3 million whereas it witnessed a sharp fall to Rs. 479 million in 2017-18. The possibility or arrival of this situation was foreseen by Board of Directors well in advance which prompted them to spur growth and retain profitability in the long run through capacity expansion.



Our growth came from the power that we generated in our plant. A short overview of the plant's performance and activities are presented below.

## Year 2016-17:

OPGC recorded a total generation of 3234.884 MUs corresponding to an average Plant Load Factor (PLF) of 87.92% at plant availability of 95.28% against the previous year performance of 3117.316 MUs on PLF of 84.50% at plant availability of 91.27%. The plant availability factor of 95.28% for 2016-17 is the highest ever.

## Highlights of 2016-17:

- OPGC achieved Highest PLF of 87.92% among the state sector utilities consecutively for second time and 5th position in all India level in terms of PLF.
- Lowest ever yearly station specific oil consumption of 0.284 ml/kWh achieved.



- Lowest number of start-ups of 18 nos. achieved.

Continuous efforts are made for improving the plant reliability and productivity through renovation/ modernisation and system up gradation as required.

- Reliability improvement of Coal handling Plant. Benefit- OPGC saved 326,000 US \$ per annum by implementation of this project.
- Reliability enhancement of lube oil system in mill.

Overall gain of 44,680 US \$ per annum worth value was enhanced by implementation of this project enhancement and enhancement of reliability of system.

### **Year 2017-18:**

OPGC recorded a total generation of 2842.347 Million Units corresponding to an average Plant Load Factor (PLF) of 77.25% at plant availability of 87.17% against the previous year performance of 3234.884 Million Units on PLF of 87.92% at plant availability of 95.28%. The fall in the PLF is mostly attributable to loss of generation due to poor quality of coal.

### **Highlights of 2017-18:**

With a PLF of 77.25 % OPGC stands in 2nd position among state sectors utilities.

Continuous efforts are made for improving the plant reliability and productivity through renovation/modernisation and system up gradation as required

- Minimization of loss in calorific value of coal during the process of storage and handling.

Tangible savings of 266,000 US \$ per annum is the outcome of this implementation

- .Reduction of start-up time after unit trip

Tangible savings of 500,000 US \$ per annum is the outcome of this implementation

- Acoustic Leak Detector in boilers

Tangible savings of 296,000 US \$ per annum is the outcome of this implementation.

### **ISO 9001:2015 Certification:**

OPGC Quality Management System ISO 9001:2008 has been successfully upgraded to ISO 9001:2015 version by certification body Bureau Veritas effective from 31st October 2017.

### **OPGC becomes an ISO 55001:2014 (Asset Management) Certified Company**

The certification which became effective from 1st April, 2017, came after months' long rigorous scrutiny and audit by internationally reputed certification agency Bureau Veritas Certification.

ISO 55001:2014 is an internationally recognised management system standard that provides a framework to manage an organisation's physical assets. It is based on the management system model of continual improvement also used for other well-known standards such as ISO 9001 or ISO 14001.

With this certification the benefits that OPGC will deliver:

- Improved financial performance.
- Improved services and outputs.
- Improved organizational sustainability.
- Improved efficiency and effectiveness.

# Business Risk Management

All business operations involve risks at different times – risk management is a condition of maintaining a sustained track of profitability.

Uncertainties may be due to events in the world and can affect industries and markets and thus have an impact on OPGC’s aspirations, vision and mission. These uncertainties also provide opportunities that OPGC tries to capture in its strategy. In some cases, the company can influence the likelihood that a risk-related event will occur. In other cases, when such events are beyond the company’s control, it strives to minimize the impact. A number of the risks that OPGC is facing are presented below.

OPGC has been working with on a systematic and structured process to assess, report, analyze, mitigate and follow-up the risks that might impact the business. The objective of the process is to improve business performance and optimize the cost of managing risks; i.e. creating, enhancing and

protecting the company’s enterprise value as well as enhancing and protecting the its assets.



TERM	RISK TYPE	DEFINITION	MANAGEMENT
Long-term	STRATEGIC RISKS Create value	Strategic risks may affect the ability to create value, the long-term development of the business and the possibility to reach company’s vision and aspirations.	Strategic risks are managed through strategies and strategic plans set by the board and executed by senior management team.
Short- and medium-term	OPERATIONAL RISKS Enhance value	Operational risks may affect OPGC’s ability to enhance value and are important for the daily business while delivering our mission and living up to the stated aspirations.	Operational risks are managed through tactical and operational business decisions as well as in operations of the business at all levels, by all employees.
	COMPLIANCE RISKS Protect value	Compliance risks may affect OPGC’s ability to protect value through threats posed on the company’s financial, organizational, or reputational standing. They are important to OPGC in order to protect its values.	Risks related to compliance rules and regulations are managed in tactical and operational business decisions and operations at all levels, by all employees under supervision of key officials. The guiding directive is OPGC’s Code of Conduct.
	FINANCIAL RISKS Enhance and protect value	Financial risks may affect the company’s ability to enhance and protect values from potential effects on OPGC’s financial position. They are important to OPGC in order to fulfill stated aspirations.	Financial risks are managed in tactical and operational business decisions at all levels, by all employees. All are following the financial framework, company’s financial policies and procedures.

## Risk Management Narrative

One of the key roles of the board and senior leadership is to provide risk oversight for OPGC, including sustainability-related risks.

## Our Approach to Risk Management and Why It Matters ?

As a responsible company, effective risk and crisis management is vital for OPGC. We use a multi-layered approach to ensure identification, awareness and effective management of our business-related risks, including sustainability risks. This includes identifying business road-map that may arise from changing conditions.

## How We Manage Risk ?

OPGC's Risk Management program enables us to identify and continually monitor risks – including economic, environmental and social risks – defined in the following categories:

- Operational and environmental, including climate-related risks
- Regulatory and compliance
- Commercial and financial
- Organizational
- Political/Social
- Strategic and reputational

Risk Identification: Staff in operations and departments throughout the company feed into this risk framework in their own areas of expertise. This includes our Health, Safety and Environment team, Sustainability team, technical teams in operations and maintenance and commercial team. Our employees also play a key role in identifying potential risk areas through their participation in many workshops and meetings. Their feedback and inputs are shared with the senior management team, which in turn uses the information to guide strategy discussions, and reports back to employees with responses to concerns, ideas and suggestions raised. The feedback is also communicated to the Board when considered material.

In addition, external stakeholder engagement is used to identify risks that are important to those external to the company, including communities, government and regulators, NGOs, the public and industry peer groups.

Risk awareness and management are the responsibility of the Board and the senior management team. OPGC's Board independently reviews the effectiveness of our identification and management of risk quarterly. This gets translated into action by our senior management team, through implementation of policies and procedures that the Board approves.



# Working Together

Society as a whole and corporations in particular are facing a series of global challenges. In order to establish which topics are relevant to our business activities and reporting, we analyze sustainability challenges using a variety of instruments and processes and assess their significance for the company and our stakeholders. In so doing, we engage in dialogue with sustainability-focused institutions, analysts, and academia. We also consider the assessment criteria of the Global Reporting Initiative (GRI). The results of this continuous process are structured on the basis of our focal areas, in which we aim to drive sustainable development along the value chain through our business activities.

In this context, OPGC engages with many people around India – as an energy provider to millions, as an employer of many hundreds and as a company that helps boost local economies through jobs and revenue.



## Communities

We engage with local communities through public consultations. These relationships are important for all our activities, but particularly for new community development projects, where our presence may bring about changes, such as job opportunities but also impacts on local resources and infrastructure.



## Employees

Through newsletters, team meetings and other communications channels, we keep our employees informed about OPGC's strategy, performance and external context. And, employees make their views known through internal communication channels.



## Government

We work with government on a range of issues from maintaining ambient air quality to environmental permitting to community investment.



## Non-governmental organizations

We interact with local and national NGOs to discuss issues as diverse as climate change and energy policy, human rights and transparency in governance.



## Shareholders and analysts

We have an ongoing dialogue with shareholders and analysts through one-to-one meetings and webcasts. We keep them informed of our strategy and plans from both financial and non-financial perspectives.

# Issue Prioritization

We include issues in our Sustainability Report if we assess them as being of high importance in terms of business impact and stakeholder concern.







Subject matter experts from across different departments of OPGC complete the initial prioritization of issues. Our Board level committees responsible for sustainability-related issues validate these findings.

## Our material issues in 2016 and 2017

<p><b>Economic</b></p> <ul style="list-style-type: none"> <li>Business performance</li> <li>Revenue generated</li> <li>Profits realised</li> </ul>	<p><b>Environment</b></p> <ul style="list-style-type: none"> <li>Water</li> <li>Air quality</li> <li>Eco-efficiency</li> </ul>
<p><b>Safety</b></p> <ul style="list-style-type: none"> <li>Plant Safety</li> <li>Preventing accidents</li> <li>Personal safety</li> <li>Cyber security</li> <li>Occupational safety</li> </ul>	<p><b>People and their Development</b></p> <ul style="list-style-type: none"> <li>Skills and capability</li> <li>Diversity and inclusion</li> <li>Ethics</li> <li>Health</li> </ul>
<p><b>Human rights</b></p> <ul style="list-style-type: none"> <li>Worker welfare</li> <li>Rights of people in communities</li> <li>Security</li> </ul>	<p><b>Governance and risk</b></p> <ul style="list-style-type: none"> <li>Governance of business</li> <li>Governance of sustainability issues</li> <li>Risk management</li> </ul>
<p><b>Society</b></p> <ul style="list-style-type: none"> <li>Social contribution</li> <li>Community engagement</li> </ul>	<p><b>Supply Chain</b></p> <ul style="list-style-type: none"> <li>Supplier relationships</li> <li>Energy efficient products</li> <li>Waste management</li> </ul>

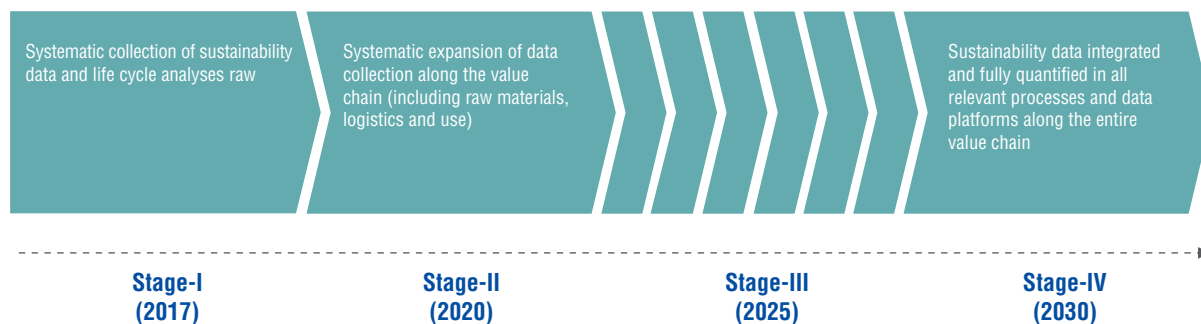
In preparing this report, we met with different stakeholders - employees, community, NGOs to business partners, to hear what issues matter most to our stakeholders.

## Important topics and opportunities for improvements along the value chain – an overview

Value	Raw Material	Generation	Logistics	Service	Use	Disposal
 <b>Performance</b>	← Prerequisite →					
 <b>Health and Safety</b>	Occupational safety	Health (including occupational safety)	Safety standards	Responsible use of raw materials		
 <b>Social Progress</b>	Social standards	Diversity and inclusion	Social standards	Education and training of professional users	Corporate citizenship: Social initiatives and education	
	Support for smallholders	Employee development				
 <b>Materials and Waste</b>	Amount and choice of raw materials	Waste footprint and disposal		Waste and recycling		
 <b>Energy and Climate</b>	Mapping of CO <sub>2</sub> footprint of the raw materials used	Energy use and CO <sub>2</sub> footprint mapping	Comprehensive CO <sub>2</sub> footprint mapping	Addressing CO <sub>2</sub> footprint concerns		
 <b>Water and Wastewater</b>	Impact and potential not sufficiently clear yet	Sustainable Water use		Water positive	Impact clarity	Biodegradability of ingredients
<b>Footprint</b>						

Analysis of our impact along the value chain:

From measuring our own generation through to comprehensive quantification



# Corporate Governance in OPGC

## Basic Approach

Based on the company's core values, OPGC strives to develop and augment corporate governance practices in order to build strengthen and maintain the trust of its shareholders/ investors, customers and society, encourage timely, decisive and risk-evaluated decision-making; seeks sustainable growth and the enhancement of corporate value over a mid to long-term time horizon; and become “a company that society wants to exist.”

## Board of Directors

The Board of Directors comprises of eight members - four from Govt. of Odisha (owns 51% stake) and an equal representation from AES Corporation (owns 49% stake) the strategic partner - the two shareholders of OPGC. OPGC's Directors are experts and achievers in their respective fields and have sound knowledge of corporate management and deep insight into the complex business environment including regulatory dynamics in which the company operates.

In order to respond to the mandate of the shareholders to achieve sustainable growth and enhance the corporate value of the Company over a medium to long term time horizon, the duties of the Board of Directors include strategic business decisions concerning key investment and operational matters, management policies and monitoring implementation of plans and programmes. All other matters are delegated to the Committee of Directors or the Functional Directors.

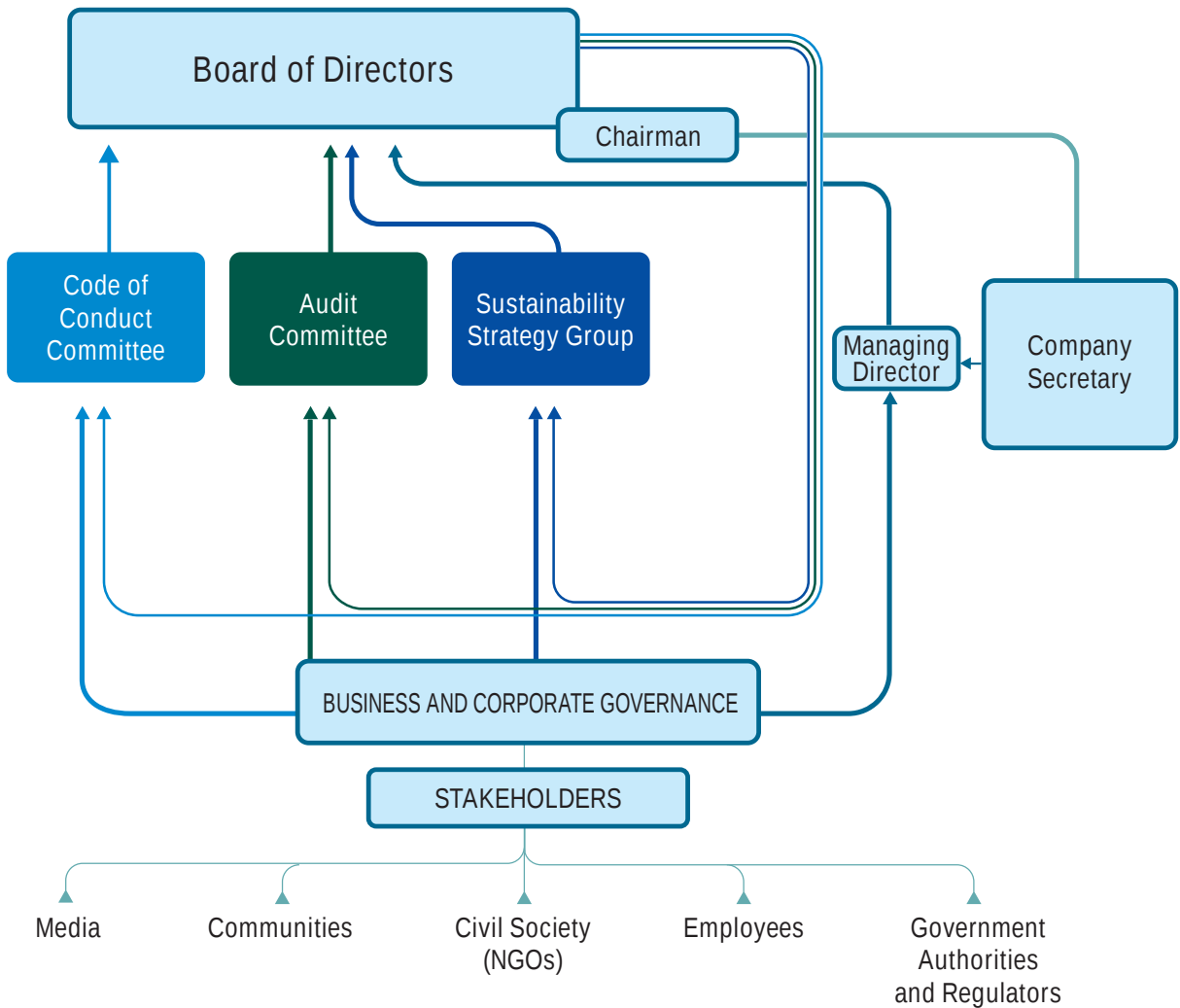
## Sustainability Governance

The top management sets OPGC's sustainability vision and mission and accordingly OPGC's sustainability model identifies, systematizes and actuates interventions which contribute to sustainable development.

## Sustainability Strategy Group

It is the Board of Directors' specialized group, responsible for staying abreast of and orienting the Group's policy, objectives and guidelines in relation to social, economic, environmental and safety matters. The group meets regularly examines, discusses and approves matters within its sphere of competence, including:

- Sustainability reporting requirements.
- Indicators of the personal, process and environmental cases.
- Greenhouse Gas (GHG) emissions; emissions reduction map and plans, and climate change initiatives.
- Community relations and stakeholder's management framework.
- Code of ethics and conduct.
- Sustainability goals.
- New internal control and compliance mechanisms.
- Risk management system.



## Audit Committee

Being the Board of Directors' specialized committee, its objective is to support the Board of Directors in discharging its supervisory duties, through periodic review of the financial information process, internal controls, independence of the external auditor, review of compliance with the applicable statutory provisions and internal regulations of OPGC.

In particular, it also has the following functions:

- To ensure that the procedural requirements of transactions are complied.
- To examine the procedures and the amendments thereto are in line with regulatory requirements and are appropriate and in the interest of the Company.

# People: Creating an Inclusive and Engaging Workplace

Our business is built on the passion and talent of our people, which is why we look to attract, motivate and retain the very best that the market has to offer. We believe that to succeed, we must create an environment in which everyone is included and treated with respect and dignity. To promote an inclusive culture, we provide leadership training and support in areas such as gender, sexual orientation, parenting, disability and ethnicity. We invest in our employees' development which includes online and classroom-based courses and resources, supported by a wide range of on-the-job learning and mentoring programmes. We reward our employees based on what they deliver and how they demonstrate behaviour that reflects our values. All employees must set priorities on their contribution to safety and creating value.

## Conducting Business Ethically

Our code of conduct is based on our values and sets clear expectations for how we work at OPGC.

Our code applies to all employees and members of the board and we expect and encourage our contractors and their employees to act in a way that is consistent with our code. We take appropriate action if those expectations are not met.

Our employees and board members certify that they understand the code, have fulfilled their responsibilities and reported any breaches. Our code specifically prohibits any form of abuse or harassment. We train our employees on applying the code in their daily work. This includes training on harassment awareness and prevention.

## Speaking up

We want our employees, contractors and other third parties to feel comfortable speaking up whenever they have a question about our code or see something that they feel is unsafe or unethical.

To this end, we encourage employees to discuss their questions or concerns with their managers and the concerns raised regarding issues such as fair treatment of people, creating a respectful, harassment-free workplace and protecting privacy and

confidentiality have been satisfactorily and speedily addressed.

OPGC has zero tolerance for retaliation against anyone who seeks advice, raises a concern, reports misconduct or participates in an investigation. The consequences for misconduct or retaliation range from coaching and performance management through to dismissal.

We also hold sessions with suppliers on our code of conduct. We discuss possible scenarios, including examples of breaches, and shared lessons learned.

## Anti-bribery and Corruption

Our code of conduct explicitly prohibits engaging in bribery or corruption in any form. Anti-bribery and corruption policy and procedures include measures and guidance to assess risks, understand relevant laws and report concerns. We provide training to employees appropriate to the nature or location of their role.

We assess any exposure to bribery and corruption risk when working with suppliers and business partners. Where appropriate, we put in place a risk mitigation plan or we reject them if we conclude that the risks are too high.

## Focus on Equal Pay

OPGC constantly endeavours to understand markets best practices, conduct industry-

specific investigations and take various actions to eliminate gender pay gap. Being a Public Sector Undertaking there isn't in fact any sort of unequal pay practiced in the company.

## **Broadening the Definition of Diversity and Inclusion**

Setting clear requirements and creating transparency are key factors in our diversity and inclusion strategy. We track our progress so that we can focus our efforts. We focus on a policy of recruiting the best candidate for any particular position.

OPGC respects merit and makes concerted efforts to create inclusion and diversity as drivers of merit. Once people are a part of the company we strive not to make them feel that their diversity is prioritised and respected.

In fact, we have succeeded in broadening the definition of diversity, beyond gender, in our daily practices. People from different parts of the organisation together created practical approaches for inclusiveness in everyday situations through meetings and communication.

Going forward, we will continue to further increase our commitment to diversity and inclusion as an important part of our cultural transformation, and create new and agile methods of implementing and measuring the progress.

## **Basic Policy for Personnel Management**

OPGC believes that human beings are born as free and unique individuals with the capacity to think, reason and create – and the ability to dream. The Company's wish is to nurture and promote these characteristics by respecting individual differences and trusting each other as equal partners. From this standpoint, OPGC practices respect for the individual, consisting of initiative, equality and trust, as one of the Company's fundamental beliefs. OPGC believes this spirit should permeate all its

relationships, not only with those in the company but with everyone in all companies with which OPGC does business. The Company follows the three principles of personnel management, specifically respecting initiative, ensuring fairness and encouraging mutual trust, when managing its human resources in areas such as recruitment, training, assignment and utilization, evaluation and treatment. OPGC seeks to create an environment in which each associate's ambitions and abilities can be developed, as well as a workplace where an individual's potential can be actively exercised.

To put these three principles into practice, OPGC has internalised the following practices.

- We accept the individual characteristics and differences of our employees and respect their willingness and initiative.
- We will always respect each individual's basic human rights and will not allow forced labor or child labor.
- Based on the principle that all human beings should have equal employment opportunities, we will strive to create opportunities for free and fair competition.
- We will not tolerate discrimination or harassment of any form in the workplace on the basis of an individual's race, ethnicity, national origin, religion, gender or age, among other characteristics.
- We will respect the social norms, customs and culture of each employee.
- We will comply with the laws, regulations and ordinances enacted in India.
- The employees and the Company will respect each other's views and endeavor to promote mutual understanding. Maintaining a relationship of mutual trust, the employees and the Company will make every effort to engage in sincere discussions about any issues that might arise or exist.



- Respecting freedom of association, or not to associate, and collective bargaining, the Company will attempt to resolve any and all issues in line with the laws, conventions and regulations of the country.
- The Company will provide a safe and healthy workplace where all employees can concentrate on work with a sense of security.

### Direction of Future Initiatives

OPGC will maintain its ongoing initiatives to expand the participation of women, and at the same time, will extend their scope to all associates to further advance and expand diversity in the true sense of the word. In addition to recruiting diverse human resources, OPGC views the acceptance of that diversity as an integral element of its philosophy on diversity. OPGC believes that respect of the individual will help foster individuality and draw out each person's unique abilities, thus increasing motivation at work. This in turn will lead to business activities that exceed customer expectations. To this end, OPGC defines diversity management as the establishment of a framework that makes effective use of diverse members and will strive to realize this. In the future, OPGC will take steps from the perspective of encouraging

active roles for people of all ages and will first expand the roles of experienced employees. By encouraging personal growth, OPGC seeks to foster human resources who exert their utmost efforts for society regardless of their age. OPGC will also speed up work style reform initiatives so that all members can experience the joy of working by feeling comfortable in the work environment and motivated in what they do.

### Addressing Gender Imbalance

Our goal is for women to represent at least 25% of our employees by 2030. We are taking action steadily to address gender disparity. Most of our jobs rely on science, technology, engineering and maths (STEM) skills, which historically have attracted more men. However, we are studying the macro situation and taking steps to improve gender diversity.

We are also working with our peers in the industry to close the gender gap in the company. To attract and retain the best men and women, we strive to put great policies into practice for all. As a leading enterprise we are aware that we must demonstrate that these policies are practised actively so that we create a culture that people want to be part of.



Creating Leaders of Tomorrow



# Initiatives on Environment, Occupational Health and Safety

The purpose of OPGC's environment, occupational health and safety management system is to promote a comfortable, safe workplace based on the most advanced and best practices. Its aim is to contribute to the welfare of the company's employees and sustainable development of OPGC business. In addition, the company has established in its regulations that it will give careful consideration to the health and safety of the contractors' employees who work full-time on OPGC's power plant premises. To maintain our efforts regarding occupational health and safety—and to improve on them continuously—OPGC has sincerely implemented a closely monitored occupational health and safety management system.

## Environmental Management System

Recognizing that environmental issues such as climate change and energy/resource issues, which require global responses, are material issues that impact OPGC's business operations, the company developed plans for environmental protection activities. From Financial Year 2013-14, environmental issues have been included as an important item of discussion for the Sustainability Strategy Group. Medium and long-term environmental policies and plans are formulated on the basis of company-wide direction and medium- and long-term business plans. All committee members are involved in the meeting's decision-making.

In terms of the progress of OPGC's environmental initiatives, the Company is striving to continuously enhance environmental management through the reflection of the above information in the medium-term business plan and policy for the following term and the implementation of the plan-do-check-act (PDCA) cycle by the environment, health and safety division.

Through OPGC's environmental protection activities, the Company works to effectively deal with climate change issues, energy issues, effective utilization of resources and preservation of clean air, which are outlined as challenges in the materiality matrix, with an aim to realize a zero-environmental impact society in the future. In particular, OPGC believes that

dealing with climate change and energy issues and the effective utilization of resources are priority challenges in the environmental field.

## Steps Towards Mitigating Climate Change Effects

OPGC is moving forward with its response to climate change through initiatives that link OPGC's business strategy with its environmental strategy.

In recent years, stakeholders have become increasingly conscious of fuel efficiency, CO<sub>2</sub> emissions and other environmental performance indices. OPGC recognizes these changes the society's thinking as critical matters to focus on, and it is actively initiating several steps.

The Company believes that climate change, resource depletion and other issues are compelling society, which is heavily dependent on fossil fuels, to face up to energy risks. Energy issues have a very significant business impact on the power business sector. As such, OPGC's concern is that unless it proceeds with energy diversification, for example, through the utilization of renewable energy, it will become difficult to achieve sustainability goals. OPGC is addressing energy issues by looking for ways towards diversifying the energy sources.

## Efficient Utilization of Resources

The depletion and resulting difficulty of obtaining coal and other resources used in the Company's business poses a significant risk to

continuity in terms of the procurement of enough raw materials necessary for generation of power for a longer duration. Therefore, OPGC considers the efficient utilization of resources one of the material issues and is actively promoting **3R (Reduction/ Reuse/ Recycling)** activities as well as ensuring proper processing when disposing of end-of-life products. Aiming at the elimination of risks related to resources and disposal that occur in various stages ranging from resource procurement to disposal, OPGC is tackling this issue through cooperation/partnership with internal/external stakeholders.

### Preservation of Clean Air

Tackling local air quality is increasingly important to communities, governments and other stakeholders, driven mainly by public health concerns. For example, we are seeing the development of new regulations in India. We monitor our air emissions and put measures in place to reduce the potential impact of our activities on the surrounding community.

OPGC recognizes that air pollution has been a critical issue since the 1960s when pollution

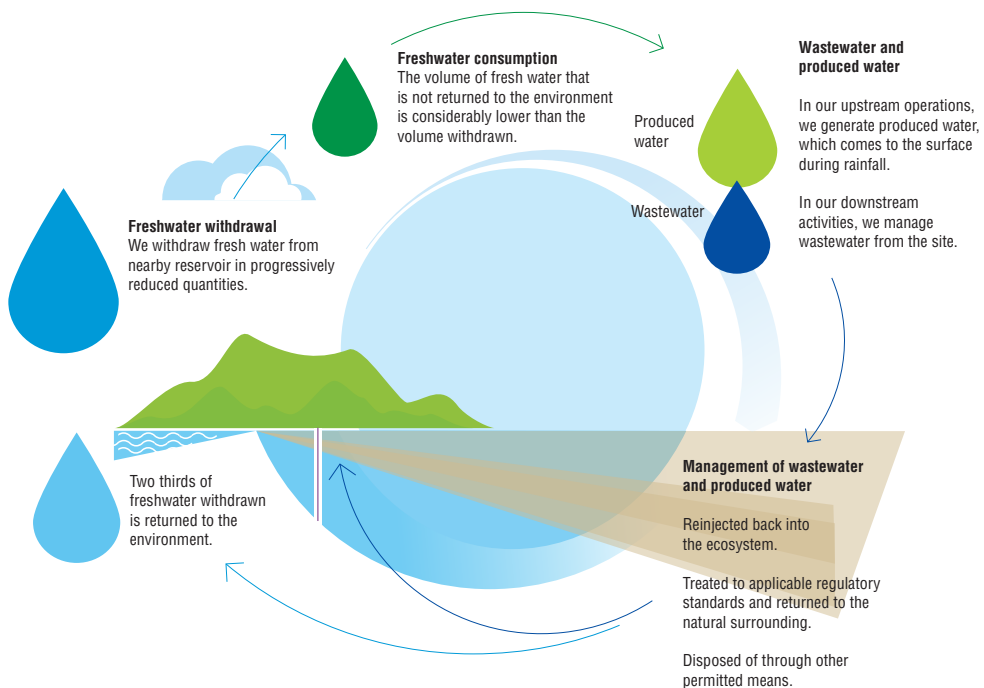
issues escalated and believes that worsening air pollution in cities has a negative effect on people's health, which hinders the realization of the "joy and freedom of mobility and a sustainable society where people can enjoy life." OPGC has sought to resolve this issue through the deployment of technologies and equipment that clean air emitted from the plant.

OPGC has also enhanced the efficiency of turbines and generators through advanced development of exhaust emission cleaning technologies. OPGC avoids risks associated with business continuation caused by increasing costs to deal with tighter environmental regulations.

In addition, OPGC procures equipment with exceptional environmental performance to be supplied at a reasonable price, and as a result, OPGC leads in cleaning exhaust emissions and addressing air pollution issues, which also leads to superior outcomes.

### Water Use

Water is used for all critical functions in the plant. We ensure that we reduce our water use in successive years and cultivate a practice of recycling and reuse for different purposes.



## Committed to Improved Environmental Performance

Ministry of Environment, Forest and Climate Change (MOEF&CC), Government of India, have stipulated utilisation of 100% Fly Ash generated at Thermal power stations. However, achieving ash utilisation target as stipulated has been a challenge for all Thermal Power Generating stations. OPGC has so far not reached to this goal despite taking all possible efforts.

In order to meet challenges including fly ash utilisation, the Company has developed strategies and objectives designed to drive long term improvement in environmental performance, which have been integrated into business planning processes.

### We care for our environment through:

- Fostering and promoting a continuous improvement culture
- Maintain and improve our pollution control equipment and facilities
- Efficient use of resources
- Pollution prevention strategies and mitigation
- Reducing the environmental impact of our operations.

A few highlights of recent achievements are:

- Electrostatic Precipitators (ESP) up-gradation to reduce emission
- Ambient Air Quality and Emission parameters online continuous monitoring
- Real time emission and ambient air transmission to Odisha State Pollution Control Board (OSPCB) and Central Pollution Control Board (CPCB).
- Maximum Recycle and Reuse of Liquid effluents up to 98%.
- Safe Ash Pond Management.
- Fugitive dust control measures through dust suppression, dust extraction and dust agglomeration
- Coal transport by rail wagons
- 01 Millions of Litres Per Day (MLD) capacity zero discharge Sewage Treatment Plant.
- 01 Metric Ton capacity Kitchen waste based biogas plant for eco- friendly disposal of kitchen waste.
- More than 34% Green Belt & Plantation coverage.
- ISO14001 certification which provides external assurance.



Best Personal Protective Equipment practices at work place

# OPGC's Preventive Safety Programme

We do not settle for the decrease in our incident rate indicators. Going beyond safety is our challenge. We have established actions to reduce both process accident rates as well as personal accident rates within the company. To this end, we have implemented a long-term safety strategy with two main focuses: reducing the accident rate indicators and systematically applying a series of anticipatory actions to avoid major accidents.

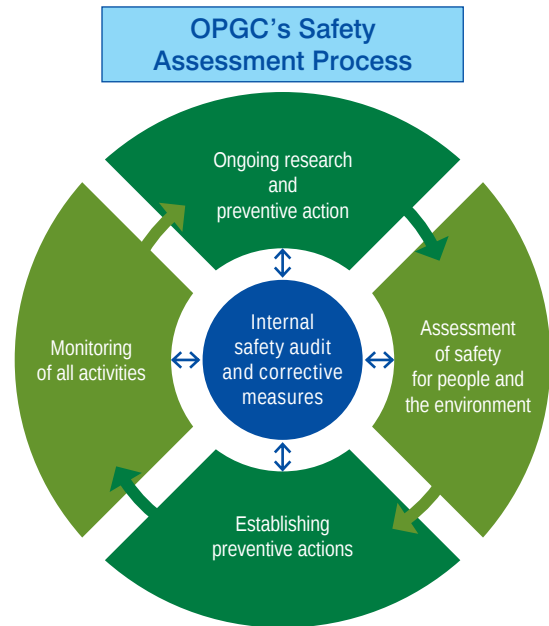
## Creating a Safer Working Environment

Safety comes first at OPGC. It is our first Value and comes before everything else we do because we care for our people and we want them to go home to their families and their community safely each day. Our goal is to make that possible for each OPGC person and contractor by creating and sustaining an incident-free workplace.

We have been continuing our pro-active safety management procedures, nurturing a culture focused on safety. Our safety strategy is centred on the belief that “all occupational injuries can be prevented and zero harm is achievable.” Our approach to safety is defined in the EHS Policy, Values and Beliefs. Our four safety beliefs are the four corner pillars of our safety management system.

### We strive to believe:

- Safety comes first for our people, our contractors and the individuals in our communities, and all our work activities need to be conducted in a safe manner that promotes personal health, safety and well-being.
- All occupational incidents can be prevented.
- Working safely is a condition of employment and each person is responsible for their own safety as well as the safety of their teammates and the people in the communities in which we work.
- All OPGC people and contractors have the right and obligation to stop work as soon as they identify a situation they believe to be unsafe



The basis of our Zero Harm approach is that we do not accept that harm should come to any of our employees, contractors and other people. Creating a safe and healthy workplace is one of the most important drivers of our business. Nothing is so urgent or important that justifies neglecting Safety principles.

Our aim is to challenge employee behaviour and change mind-sets, and as we say, safety is a journey which does not end. We continually seek ways to enhance our operations in the areas of health, safety and the environment.

**“Put safety First” is our first value, Safety is our way of life and “Always on for Safety” is our habit.**

Our intelligent Environment, Health & Safety (EHS) management system in line with OHSAS 18001 and Global Safety Standards helps us reliably achieve what we really believe in: We are in the sixth year of Lost Time Injury (LTI) free journey in our operation. The company has bagged a number of State as well as National levels EHS awards over the years.



**People:** We performed several assessments of the safety culture at our facilities, and we implemented various training actions to reduce the accident rate resulting from human factors.



**Processes:** We are strengthening the principle of safety integrated into operations. We carried out actions to manage critical processes, which, because of their hazardous nature, must be performed with greater care.



**Plant:** Preventive maintenance and inspection plans; the verification of our safety systems; the improvement of our protection barriers; and the identification of the most critical elements have always been the objectives of our actions.

## Basic Safety Steps

To reduce the personal accident rate, it was decided that several rules be followed by employees and contractors. Safety begins with each one of us, and these rules can be the final barrier to avoid an accident.



Safe driving



Work permits



Isolation and lockout



Entry barriers to confined space



Excavation caution



Mobile equipment usage rules



Work at height measures



Lifting operations precautions



Dropped objects handling



Prevention of leaks

# Creating Value for Society

Responsible business and sustainable energy solutions are prerequisites for OPGC's mission of driving prosperity, and thereby we contribute to the development of our society.

We strive to assume economic, environmental and social responsibility for our operation and our services in the areas where we have the potential to influence. This will enable us to strengthen our brand and relations with stakeholders and thus create new business opportunities that offer long-term growth and improved profitability. As a responsible company, we have partners, suppliers, customers and other stakeholders. With this diverse footprint, we are committed to use our leverage to contribute to a more sustainable and prosperous world.

## Contribute to a Sustainable Future

Sustainable energy solutions advance development in the society. OPGC applies a holistic approach to developing and delivering energy and other services responsibly and sustainably. Responsibility and sustainability are vital components throughout the value chain. We transform our business and society through the power we generate and services

that advance sustainable economic, social and environmental development. By linking each of the three areas we build resilience and mitigate risk through embedding Corporate Social Responsibility (CSR) and sustainability into our daily work. We actively consider global trends and challenges, international norms of responsible business behavior and stakeholder expectations when developing our work. We address societal challenges related to our business and contribute to a prosperous and resilient society. Therefore OPGC has a societal engagement program based on the "creating shared value" principle.

## Ongoing CSR Interventions

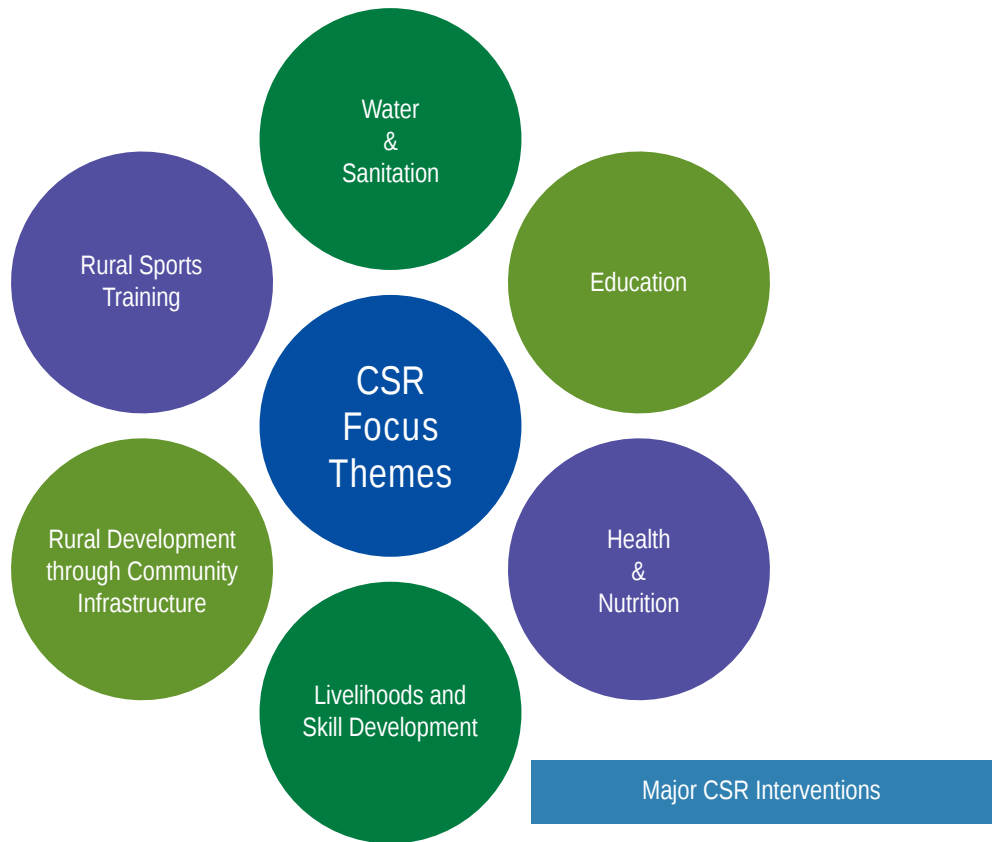
OPGC, through its Corporate Social Responsibility (CSR) interventions has been sincerely making attempts to bring about qualitative changes in lives of people in the peripheral villages of its thermal power plant at Banharpali of Lakhanpur Block in Jharsuguda district in Odisha, India.

## CSR Strategy



- All projects are approved by the CSR Committee and subsequently the Board of Directors of OPGC.
- Regular monitoring of all projects by the CSR Committee
- Identification of priority areas keeping in view needs of the local community and other stakeholders.
- Interventions contribute as well as facilitate holistic development of stakeholder communities through participatory planning and accountability
- Tie-up with specialized and professional agencies for focused approach and best outcomes
- Thrust on marching towards sustainability of the interventions





OPGC organized Stakeholder consultation meetings through CSR team to identify the projects and programmes to be implemented during the succeeding financial year and review the performance of current and ongoing projects. It forges partnership with a variety of agencies to implement the programmes successfully and to the satisfaction of stakeholders.



Snapshots of CSR activities in OPGC's peripheral villages

Through its CSR work in the communities OPGC reaches out to more than 50,000 people in 50 villages and hamlets near its power plant location. It contributes to the following Sustainable Development Goals (SDGs) too.

## UN SDGs – OPGC’s Social Investment Focus



**Note** - For detailed report on annual CSR activities please visit: [www.opgc.co.in/fin/a3.asp](http://www.opgc.co.in/fin/a3.asp)



# Sourcing

In selecting and working with our business partners, we also consider their performance in regard to safety, health, environment, social standards and fair business practices. This is based on our corporate Safety, Health and Environmental Protection policy. These standards represent our early commitment to responsibility along the entire value chain.

## Honoring our Suppliers

As part of our supplier management activities, we collaborate intensively with our strategic suppliers to ensure the procurement of sustainable raw materials. We aim to initiate positive changes throughout the value chain, through joint projects on process optimization, resource efficiency, and environmental and social standards.

## Strengthening Supply Chain Sustainability

In order to provide customers with a timely, stable supply of better products and services, it is necessary to put significant effort into developing and optimizing supply chains with suppliers around the world while also taking into account environmental and human rights issues.

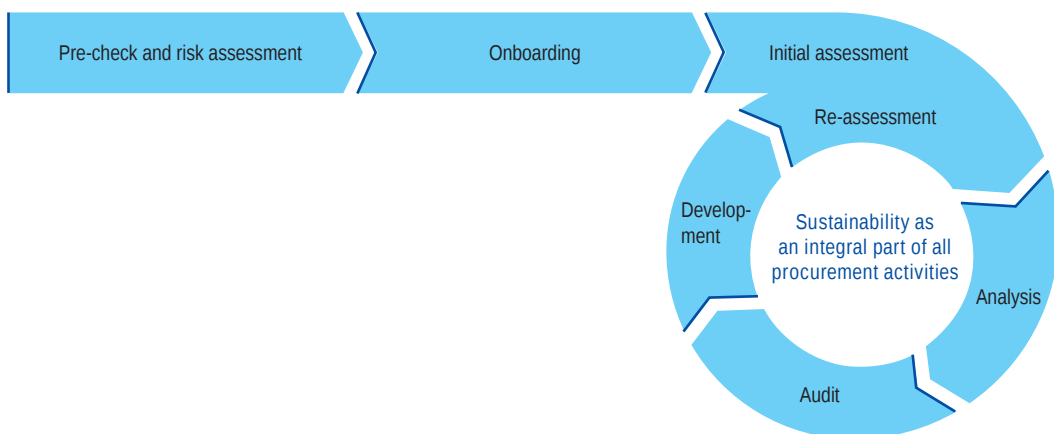
Companies within the power sector, which is a broad-based industry supported by many suppliers, must pursue the reduction of not only their own environmental impacts but also those of suppliers throughout their entire supply chain.

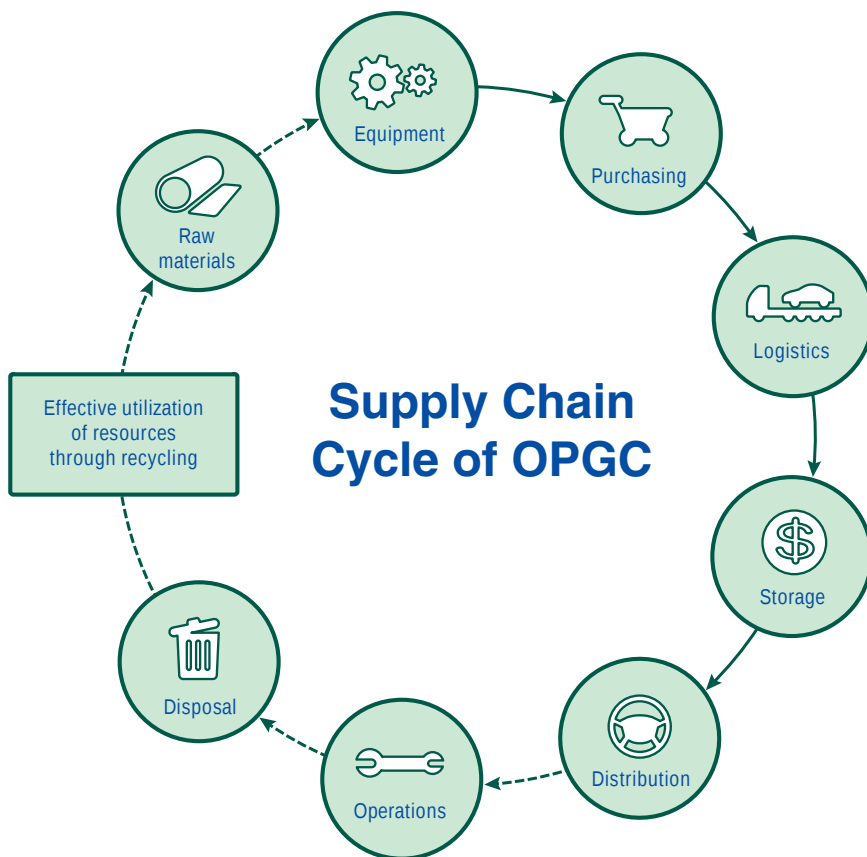
In addition, as awareness of compliance and human rights issues grows worldwide, companies are being asked to verify working conditions and legal compliance not only for themselves but also for their suppliers, as well as to make efforts to take corrective action if required.

From FY 2013-14, OPGC is requesting disclosure of risks and opportunities related to Greenhouse Gas (GHG) emissions and the environment from suppliers in addition to information on matters relating to operational operational domains.

In this way, through the Company's efforts to actively promote sustainable initiatives at its power plant in cooperation with all its suppliers. OPGC is seeking to be **"a company that is liked by and has strong roots in local communities"** and to realize a supply chain where OPGC can co-exist with and provide mutual benefit for the Company and local communities.

OPGC is striving to strengthen supply chain sustainability mainly in the areas of purchasing and logistics.





### Basic Approach to Supply Chain System

OPGC's goal is to achieve a sustainable society across the supply chain. The Company implements initiatives with consideration for the environment, safety, human rights, compliance and social responsibility, among others, in partnership with its suppliers. Based on this broad philosophy, the Company engages in business that is fair and equitable with transparency.

### Supply Chain Belief

We sustain the procurement of good products and services at reasonable prices and in a timely manner

#### Three Supply Chain Principles

##### Fair and open trade

We do business with suppliers who can satisfy the requirements of quality, quantity, price and timing and who can share the concept of sustainability with us, based on open competition.

##### Equal partnership

We conduct business on an equal footing regardless of the business size of the supplier or their location and other factors.

##### Respect for suppliers

We respect suppliers' management and dignity.

<b>Safety</b>							
Category: Employees	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	
No.of Fatal	0	0	0	0	0	0	0
Reportable	0	0	0	0	0	0	0
Non Reportable (First Aid Cases)	1	4	1	1	0	3	
Occupational Safety and Health Administration (OSHA), US Recordable	0	0	0	0	0	0	
Man Days Loss							
Fatal	0	0	0	0	0	0	0
Reportable	0	0	0	0	0	0	0
Non-Reportable	0	0	0	0	0	0	0
Total Man hours Worked	886504	930200	973032	920936	900656	861488	
OSHA Injury Rate IR- (Reportable + Fatal)	0	0	0	0	0	0	0
IR- Total (Reportable + Fatal + Non Reportable+ Recordable)	0.225605	0.86003	0.822172	0.21717	0	0.69646	
Total Man days worked	110762	116755	121629	115117	112582	107686	
Frequency Rate							
Reportable + Fatal	0	0	0	0	0	0	0
Total (Reportable + Fatal + Non Reportable+Recordable)	1.128026	4.300151	1.027715	1.085852	0	3.4823	
Category: Contractors							
No.of Fatal	0	0	0	0	0	0	0
Reportable	1	0	0	0	0	0	0
Non Reportable (First Aid Cases)	11	13	9	6	2	10	

<b>Safety</b>						
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Occupational Safety and Health Administration(OSHA), US Recordable	1	0	0	0	0	0
Man Days Loss						
Fatal	0	0	0	0	0	0
Reportable	15	0	0	0	0	0
Non-Reportable	0	0	0	0	0	0
Total Man hours Worked	2063408	2392728	2570616	2506856	2336800	2432496
OSHA Injury Rate IR- (Reportable + Fatal)	0.096927	0	0	0	0	0
IR- Total(Reportable + Fatal + Non Reportable+recordable)	1.260051	1.086626	1.011431	1.037156	0.17117	0.8222
Total Man days worked	257926	294641	321327	313357	292100	304062
Frequency Rate						
Reportable + Fatal	0.484635	0	0	0	0	0
Total (Reportable + Fatal + Non Reportable+Recordable)	6.300257	5.433129	5.057154	5.185779	0.8558	4.111

<b>Environment</b>						
<b>Materials used by weight or volume</b>		<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
<b>Raw Material</b>						
Coal	(MT)	2576597	2321287	2788435	2621400	2582719
Light Diesel Oil (LDO)	(KL)	2052.064	1563.654	1323.562	918.055	1424.688
Demineralsised (DM) water	(MT)	103837	85532	91009	83262	81133
<b>Associated process material</b>						
Lubricant	(LTR)	94614			39749	37443
Grease	(KG)	11942			9228	10152
<b>Total water withdrawal by source.</b>						
Surface water withdrawn	in m3/yr	8671323	8478270	9393470	10193088	9160832
<b>Percentage and total volume of water recycled and reused (in m3/ year)</b>						
Waste water	(Ash water recycling, Boiler Turbine Generator (BTG) effluent recycling, Cooling Water Blow down etc)	8455000	8286000	9662000	8880000	10097841
<b>Impacts of thermal discharge</b>						
No significant impact on biodiversity because of negligible discharge of waste water after cooling. Discharged water temperature is being monitored, never exceeds 35 degree centigrade.						
<b>EN 22: Total water discharge by quality and destination.</b>						
<b>Combined effluent Discharge Quantity (M3/Year)</b> (Cooling Tower Drift Loss & Gravity Sand Filter Backwash) after treatment & quality conformation	Destination: Hirakud Reservoir	11168	97119	108657	139050	122780

<b>Environment</b>							
<b>Water Quality parameters</b>		<b>Limits</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
Temp(IN) oC		T(O) - T(I) = <5.0C	24.3	24.6	25.4	26.30	25
Temp(OUT) oC			26.5	27.1	28.8	29.56	28
pH		5.5 - 9.0	7.2	7.29	7.6	7.62	7
Total Suspended Solids (TSS), mg/ltr		100	18.7	13.5	34.9	45.92	42
Oil & Grease (O&G), mg/ltr		10	0.75	0.84	0.9	0.79	0.9
Total Dissolved Solids (TDS), mg/ltr		2100	256	226	282	295.35	238
Biochemical Oxygen Demand (BOD), mg/ltr		30	4	3.2	3.3	3.42	3.5
Chemical Oxygen Demand (COD), mg/ltr		250	33.5	30.4	32.8	37.65	29
<b>Total weight of waste by type and disposal method</b>							
<b>Non – hazardous</b>		<b>Disposal method</b>					
1. Mild Steel Scrap Qty (in tonnes)		Recycling after temporary on site storage	324.429	975.786	92.735	409.2	107.97
2. Stainless Steel Scrap, Qty (in tonnes)		-do-	2.5	0	0	0	0
3. Used & waste Batteries, Nos		-do-	280	30	11	51	0
<b>Hazardous waste</b>							
1. Used oil, in KL		Recycling after temporary on site storage	71.2 Kl	13.365	13.65	36.615	33.34
2. Used grease, in MT		Recycling after temporary on site storage	9	6.12	3.24	22.933	6.48
3. Spent Resin, Kg		Stored in underground concrete chamber	1600 kg	3000	0	0	0

<b>Environment</b>						
<b>Total environmental protection expenditures and investments by type</b>						
	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	
Treatment of waste	200,000.00	4,956,210.00	2,624,123.00	6,170,610.00	4,650,250.00	
Purchase & use of emission certificates ( Consent Fee)	800,000.00	2,004,079.00	2,147,184.00	2,313,356	1,160,121	
Depreciation of related equipment, maintenance & operating material and services and related personnel cost	-	14,444,298.33	32,334,305.55	Data to be provided	Data to be provided	
Insurance for environmental liability	70,665.00	53,757.00	95,730.00	8,895.00	53,120.00	
Environmental education and training & awareness campaign	100,000.00	110,000.00	118,000.00	134,839.00	152,257.00	
External services for environment management	-	585,393.00	620,107.00	700,000.00	1,244,000.00	
External certification of management systems	161,000.00	67,751.00	70,000.00	159,850.00	96,179.00	
Research & development		-	-	-	-	
Extra expenditure to install new technologies	130,000,000.00	229,694,269.00	4,752,306.00	-	-	
Extra expenditure on green purchases	-	-	19,994,296.00	-	3,800,000.00	
Others ( Plantation etc.)	-	400,000.00	85,000.00	2,400,000.00	-	
	<b>131,331,665.00</b>	<b>252,315,757.33</b>	<b>62,841,051.55</b>	<b>11,887,550.00</b>	<b>11,155,927.00</b>	

<b>Environment</b>	
<b>Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms</b>	Nil
<b>Specific initiatives undertaken in the reporting period to mitigate the most significant environmental impacts of products and service groups in relation to</b>	
*Main raw material coal is being used with efficient plant operation	
*Specific water consumption kept minimum with optimum consumption, minimum wastage.	
*GHG emission controlled with process control and optimum consumption. Avoiding use of toxic substance and ODS substance	
*Close to 98% effluent recycled & reused	
*Putting all possible effort towards maximum utilization of coal ash	
<b>Waste Disposal Method</b>	
1. MS Scrap	Disposed to scrap dealers
2. SS Scrap	In stock
3. Used & waste Batteries	Buy back or sold to authorized suppliers
1. Used oil	Disposed to authorized recyclers/reprocessors
2. Used grease	Disposed to authorized recyclers/reprocessors
3. Spent Resin	Final disposal to CHT
<b>Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations during the reporting period (2016-17 to 2017-18)</b>	
Nil	



<b>Greenhouse Gas Emissions (GHG): Scope 1</b>						
		2013-14	2014-15	2015-16	2016-17	2017-18
Source of Emission: Fuels Consumption (Coal), for electricity generation	Method of estimation: CO2 baseline database by Central Electricity Authority of India (CEA) userguide version 9.0	2998697	2938865	3273182	3396628	2984464
<b>GREENHOUSE GAS (GHG) EMISSIONS INTENSITY</b>						
Total emissions per unit production	Method of estimation: CO2 baseline database by Central Electricity Authority of India (CEA) userguide version 9.0	1.05 t CO2/MWh (As on date, there has not been specific initiative taken to reduce GHG emission)				
<b>Emissions of ozone-depleting substances by weight</b>						
1. R 22 (Consumption in Kg)		305	366	183	406	251
2. SF6 (Consumption in Kg)		100	50	50	57	48
<b>NO, SO, and other significant air emissions/ pollutants by type and weight.</b>						
	Prescribed limits by SPCB					
Nox (in lb)	NA	7545708	6698842	8940163	8892631	7843144
Sox (in lb)	NA	47976572	41976589	53162428	52773183	42174202
Stack Particulate matter (in lb)	Conc-100 mg/Nm <sup>3</sup> , Qty- 46349986 lb	4779988	4238450	4945048	3690945	3228890

<b>Value to Society: EC 1 - Direct economic value generated and distributed</b>					
	2013-14	2014-15	2015-16	2016-17	2017-18
	Rs. Lacs	Rs. Lacs	Rs. Lacs	Rs. Lacs	Rs. Lacs
a. Revenues	62,264	63,001	70,595	75,809	62,312
b. Operating costs	39,282	35,690	46,052	57,473	53,266
c. Employee wage & benefits	4,531	4,231	5,994	5,799	8,024
d. Payments to providers of capital			465	977	20
e. Payments to government	5,626	7,906	6,333	4,443	380
f. Community investments -CSR	68	117	268	324	142
Economic Value Retained [a-(b+c+d+e+f)]	12,757	15,057	11,483	6,793	479

Efficiency	2013-14	2014-15	2015-16	2016-17	2017-18
EU1: Installed capacity, broken down by primary energy source and by regulatory regime.					
The fuels used for producing energy in the plant	Coal	Coal	Coal	Coal	Coal
Installed capacity of the plant in MW	2 x 210 MW	2 x 210 MW	2 x 210 MW	2 x 210 MW	2 x 210 MW
Total Installed capacity of the utility in MW.	420 MW	420 MW	420 MW	420 MW	420 MW
Net energy output broken down by primary energy source and by regulatory regime.					
Net energy generated by the utility in GWh :		2498.546	2772.82	2885.673	2511.801
Average generation efficiency of thermal plants by energy source and regulatory regime.					
Average annual efficiency of the energy source.		35.48%	35.44%	35.53%	34.85%
Net efficiency as a percentage (electricity sentout/energy input).		31.73%	31.64%	31.85%	30.99%
Average plant availability factor by energy source and by regulatory regime.					
Total No. of Hours of Planned Outage		2564.88	961.27	540.63	1476.87
Total No. of Hours of Forced Outage		1144.5	503.31	207.59	628.9
The average availability factor by energy source and by regulatory regime.		78.83	91.66	95.73	87.98
EN 3: Energy consumption within the organisation					
Total fuel consumption (Coal in MT) - Non Renewable	2576597	2321287	2788435	2912904	2582719
Total fuel consumption (LDO in KL) - Non Renewable	2052.064	1563.654	1323.562	918.055	1424.668
total electricity generated (MU)	2855.902	2798.919	3117.316	3234.884	2842.347
total electricity consumption (MU)	304.146212	295.157967	334.158756	335.398324	315.330209
total electricity sold (MU)	2547.122	2498.546	2772.82	2885.673	2511.801
EN 5: ENERGY INTENSITY (Total Energy Consumed)					
in Million Joules	1094926363	1062568681	1202971522		
Energy consumed per unit production	10.65	10.55	10.72	10.37	11.09
EN 6: Energy saved due to conservation and efficiency improvements.					
Process Redesign (in kwh)	0	0	268431	0	0
Conversion and retrofitting of Equipment (in kwh)	4556080	7292040	0	5012910	8059200
Changes in Personnel Behaviour (in kwh)	0	0	4200000	0	0
Any initiative to reduce fuel consumption reported in EN3	0	19430 MT	340 MT	39400 MT	20656 MT
Total Energy saved (in kwh)	4556080	7292040	4468431	5012910	8059200

People						
	2013-14	2014-15	2015-16	2016-17	2017-18	
Number of employees						
Total number of employees	709	648	681	827	804	
Number of Employees on Permanent Contract	644	530	539	633	611	
Number of Male Employees	612	507	514	611	591	
Number of Female Employees	32	23	25	22	20	
Number of Employees on Temporary Contract	65	118	142	194	193	
Number of Male Employees	62	113	136	183	186	
Number of Female Employees	3	5	6	11	7	
Number of employees- Senior Management	65	127	146	156	152	
% of Women in Senior Management	5%	2%	1%	2%	2%	
Total number, age group and gender of new employee hires during the reporting period						
Male	73	77	48	57	56	
Female	3	2	2	2	2	
<30	45	17	23	34	36	
30-50	28	59	24	23	20	
>50	2	3	3	2	2	
TOTAL	75	79	50	59	58	

People						
	2013-14	2014-15	2015-16	2016-17	2017-18	
Total number and rate of employee turnover during the reporting period, by age group, gender						
Death in Service	2	4	2	2	2	2
Resigned	14	22	20	29	29	29
Retired	7	1	11	6	11	11
Dismissal	0	0	0	0	0	0
TOTAL	23	27	33	37	42	42
Male	N.A	27	31	37	40	40
Female	N.A	0	2	0	2	2
Employee Turn Over %	3%	4%	5%	4%	5%	5%
RETURN TO WORK AND RETENTION RATES AFTER PARENTAL LEAVE, BY GENDER						
Total No. of employees entitled to parental leave	709	648	681	827	804	804
Male	674	620	650	794	777	777
Female	35	28	31	33	27	27
Total No. of employees who availed parental leave	1	5	3	5	10	10
Male	1	5	3	5	10	10
Female	0	0	0	0	0	0
No. of employees who returned to work after availing leave	1	5	3	5	10	10
Male	1	5	3	5	10	10
Female	0	0	0	0	0	0

People						
	2013-14	2014-15	2015-16	2016-17	2017-18	
No. of employees retained by organisation after returning from parental leave for at least 12 months after their return to work	1	4	3	5	10	
Male	1	4	3	5	10	
Female	0	0	0	0	0	
Percentage of employees receiving regular performance and career development reviews						
Executive						
Male	129	268	308	373	429	
Female	6	15	15	7	7	
Total number of executives received performance review	135	283	323	380	436	
Non- Executive						
Male	262	316	296	280	267	
Female	8	12	13	13	11	
Total number of non-executives received performance review	270	328	309	293	278	
TOTAL	405	611	632	673	714	

People						
	2013-14	2014-15	2015-16	2016-17	2017-18	
Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category						
Eligible to retire in 5 years	72	N.R	N.R	14	35	
Executive	26					
%	20					
Non- Executive	46					
%	17					
Eligible to retire in 10 years	195	N.R	N.R	18	64	
Executive	45					
%	34					
Non- Executive	150					
%	55					
LA 13:Ratio of basic salary and remuneration of women to men by employee category						
Total Salary (Incl. Perq.) Men (Both Executive and Non- Executive)	22,228,421	N.R	N.R	427,644,832	464,493,379	
Total Salary (Incl. Perq.)Women (Both Executive and Non- Executive)	950,409	N.R	N.R	15,204,000	16,239,496	
Total	23,178,830	N.R	N.R	442,848,832	480,732,875	
Ratio	(96:4)	N.R	N.R	(96:3)	(96:3)	
N.R - Not Reported						



<b>Training: LA 10 - Average hours of training per year per employee, by gender, and by employee</b>		2016-17	2017-18
<b>EMPLOYEES</b>			
Number of Trained Executives (Includes both in-house and external)		312	247
Male		297	229
Female		15	18
Training Hours (No. of training Days x total hours per day)		6936	8280
Male		6592	7896
Female		344	384
Number of Trained Non- Executives (Includes both in-house and external)		195	211
Male		193	209
Female		2	2
Training Hours (No. of training Days x total hours per day)		5136	4624
Male		5080	4624
Female		56	0
<b>CONTRACTOR EMPLOYEES</b>			
Number of Trained Contractor Employees		317	337
Male		263	279
Female		54	58
Training Hours (No. of training Days x total hours per day)		8876	13480
Male		7364	11160
Female		1512	2320
SO 4 Communication and training on anti-corruption, sexual harassment policies and procedures			
Number of Employees who have received such training		0	115
% of total employees		0	31%

<b>Sourcing: Operation</b>						
	Budget Spent FY 2013-14 (% of total spend)	Budget Spent FY 2014-15 (% of total spend)	Budget Spent FY 2015-16 (% of total spend)	Budget Spent FY 2016-17 (% of total spend)	Budget Spent FY 2017-18 (% of total spend)	
Procurement of various items categories locally	4%	9.85%	13.91%	6.72%	11.83%	
Procurement of spares/consumables from local suppliers						
Procurement of stationeries from local suppliers						
Procurement of structural steel from local suppliers						
Procurement of uniforms/shoes/furniture's etc						
Total No of orders/ No of Orders Placed to Local suppliers provider's	380	750/249	480/122	736/249	673/228	
Various maintenance activities outsources locally						
Plant Maintenance work outsource locally	36.54%	30.02%	24.05%	49.25%	35.99%	
Civil/Infrastructure work outsource locally						
Housekeeping/catering work outsource locally						
Other activities of organization outsource locally (like IT services, consultancy services etc)						
Total No of orders/ No of Orders Placed to Local service providers	91/380	345/142	338/141	205/80	278/104	
	24%	41%	42%	39%	37%	

# GRI G4 Content Index



## GRI G4 Content Index for General Standard Disclosures General Standard Disclosures

General Standard Disclosures	Disclosure Item	Page No. of Disclosure	Fully Reported/ Not Reported/ Partially Reported
<b>STRATEGY AND ANALYSIS</b>			
G4-1	Provide a statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.	1, 2	Fully Reported
G4-2	Provide a description of key impacts, risks, and opportunities.	11, 12	Fully Reported
<b>ORGANIZATIONAL PROFILE</b>			
G4-3	Report the name of the organization.	Back Cover	Fully Reported
G4-4	Report the primary brands, products, and services.	8	Fully Reported
G4-5	Report the location of the organization's headquarters.	Back Cover	Fully Reported
G4-6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	Back Cover	Fully Reported
G4-7	Report the nature of ownership and legal form	16	Fully Reported
G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	9	Fully Reported
G4-9	"Report the scale of the organization, including: <ul style="list-style-type: none"> <li>Total number of employees</li> <li>Total number of operations</li> <li>Net sales (for private sector organizations) or net revenues (for public sector organizations)</li> <li>Total capitalization broken down in terms of debt and equity (for private sector organizations)</li> <li>Quantity of products or services provided"</li> </ul>	38, 39, 40	Fully Reported
G4-10	"Report the scale of the organization, including: <ul style="list-style-type: none"> <li>Total number of employees</li> <li>Total number of operations</li> <li>Net sales (for private sector organizations) or net revenues (for public sector organizations)</li> <li>Total capitalization broken down in terms of debt and equity (for private sector organizations)</li> <li>Quantity of products or services provided"</li> </ul>	-	Not Applicable
	"Additional disclosure requirements Report on total contractor workforce (contractor, subcontractor, independent contractor) by employment type, employment contract and regulatory regime."	40	Fully Reported
G4-11	Report the percentage of total employees covered by collective bargaining agreements	-	Not Reported
	"Additional disclosure requirements Report on percentage of contractor employees (contractor, sub-contractor and independent contractor) working for the reporting organization covered by collective bargaining agreements by country or regulatory regime."	20	Fully Reported
G4-12	Describe the organization's supply chain	30	Fully Reported
G4-13	"Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain, including: <ul style="list-style-type: none"> <li>Changes in the location of, or changes in, operations, including facility openings, closings, and expansions</li> <li>Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations)</li> <li>Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination"</li> </ul>	-	Not Applicable
G4-14	"COMMITMENTS TO EXTERNAL INITIATIVES Report whether and how the precautionary approach or principle is addressed by the organization."	12	Fully Reported

G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	Nil	Fully Reported
G4-16	"List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization: <ul style="list-style-type: none"> <li>• Holds a position on the governance body Participates in projects or committees</li> <li>• Provides substantive funding beyond routine membership dues</li> <li>• Views membership as strategic This refers primarily to memberships maintained at the organizational level."</li> </ul>	Nil	Fully Reported
	EU1 INSTALLED CAPACITY, BROKEN DOWN BY PRIMARY ENERGY SOURCE AND BY REGULATORY REGIME	39	Fully Reported
	EU2 NET ENERGY OUTPUT BROKEN DOWN BY PRIMARY ENERGY SOURCE AND BY REGULATORY REGIME	39	Fully Reported
	EU3 NUMBER OF RESIDENTIAL, INDUSTRIAL, INSTITUTIONAL AND COMMERCIAL CUSTOMER ACCOUNTS	-	Not Applicable
	EU4 LENGTH OF ABOVE AND UNDERGROUND TRANSMISSION AND DISTRIBUTION LINES BY REGULATORY REGIME	-	Not Applicable
	EU5 ALLOCATION OF CO <sub>2</sub> e EMISSIONS ALLOWANCES OR EQUIVALENT, BROKEN DOWN BY CARBON TRADING FRAMEWORK	-	Not Reported
<b>IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES</b>			
G4-17	"a) List all entities included in the organization's consolidated financial statements or equivalent documents b) Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report. The organization can report on this Standard Disclosure by referencing the information in publicly available consolidated financial statements or equivalent documents."	Back Cover	Fully Reported
G4-18	a. Explain the process for defining the report content and the Aspect Boundaries. b. Explain how the organization has implemented the Reporting Principles for Defining Report Content.	3, 4, 5	Fully Reported
G4-19	List all the material Aspects identified in the process for defining report content.	14, 15	Fully Reported
G4-20	"For each material Aspect, report the Aspect Boundary within the organization, as follows: Report whether the Aspect is material within the organization If the Aspect is not material for all entities within the organization (as described in G4-17), select one of the following two approaches and report either: <ul style="list-style-type: none"> <li>• The list of entities or groups of entities included in G4-17 for which the Aspect is not material or</li> <li>• The list of entities or groups of entities included in G4-17 for which the Aspects is material</li> </ul> Report any specific limitation regarding the Aspect Boundary within the organization"	14, 15	Fully Reported
G4-21	"For each material Aspect, report the Aspect Boundary outside the organization, as follows: Report whether the Aspect is material outside of the organization If the Aspect is material outside of the organization, identify the entities, groups of entities or elements for which the Aspect is material. In addition, describe the geographical location where the Aspect is material for the entities identified Report any specific limitation regarding the Aspect Boundary outside the organization"	-	Not Applicable
G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	-	Not Applicable
G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	-	Not Applicable
<b>STAKEHOLDER ENGAGEMENT</b>	<b>These Standard Disclosures provide an overview of the organization's stakeholder engagement during the reporting period. These Standard Disclosures do not have to be limited to engagement that was conducted for the purposes of preparing the report.</b>		
G4-24	Provide a list of stakeholder groups engaged by the organization.	7, 9, 13	Fully Reported
G4-25	Report the basis for identification and selection of stakeholders with whom to engage.	13	Fully Reported
G4-26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process	7, 9, 13	Fully Reported
G4-27	"Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns."	14	Fully Reported

REPORT PROFILE	These Standard Disclosures provide an overview of the basic information about the report, the GRI Content Index, and the approach to seeking external assurance.		
G4-28	Reporting period (such as fiscal or calendar year) for information provided.	Cover Page	Fully Reported
G4-29	Date of most recent previous report (if any)	2014-15, 15-16	Fully Reported
G4-30	Reporting cycle (such as annual, biennial)	Biennial	Fully Reported
G4-31	Provide the contact point for questions regarding the report or its contents	4	Fully Reported
G4-32	"GRI CONTENT INDEX a) Report the 'in accordance' option the organization has chosen b) Report the GRI Content Index for the chosen option (see tables below) c) Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines."	Cover Page	Fully Reported
G4-33	"a) Report the organization's policy and current practice with regard to seeking external assurance for the report. b) If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided. c) Report the relationship between the organization and the assurance providers. d) Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report. "	-	Not Externally Assured
<b>GOVERNANCE</b>			
G4-34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	16, 17	Fully Reported
G4-35	Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees	16, 17	Fully Reported
G4-36	Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body.	16, 17	Fully Reported
G4-37	Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics. If consultation is delegated, describe to whom and any feedback processes to the highest governance body.	17	Fully Reported
G4-38	"Report the composition of the highest governance body and its committees by: • Executive or non-executive • Independence • Tenure on the governance body • Number of each individual's other significant positions and commitments, • and the nature of the commitments • Gender • Membership of under-represented social groups • Competences relating to economic, environmental and social impacts • Stakeholder representation "	16, 17	Fully Reported
G4-39	Report whether the Chair of the highest governance body is also an executive officer (and, if so, his or her function within the organization's management and the reasons for this arrangement).	17	Fully Reported
G4-40	"Report the nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members, including: • Whether and how diversity is considered • Whether and how independence is considered • Whether and how expertise and experience relating to economic, environmental and social topics are considered • Whether and how stakeholders (including shareholders) are involved"	-	Not Reported
G4-41	"Report processes for the highest governance body to ensure conflicts of interest are avoided and managed. Report whether conflicts of interest are disclosed to stakeholders, including, as a minimum: • Cross-board membership • Cross-shareholding with suppliers and other stakeholders • Existence of controlling shareholder • Related party disclosures "	-	Not Reported

G4-42	<p>"HIGHEST GOVERNANCE BODY'S ROLE IN SETTING PURPOSE, VALUES, AND STRATEGY The highest governance body sets the tone for the organization, and has a major role in defining its purpose, values and strategy.</p> <p>Report the highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts.</p> <p>HIGHEST GOVERNANCE BODY'S COMPETENCIES AND PERFORMANCE EVALUATION These Standard Disclosures describe the highest governance body's and senior executives' willingness and capability to understand, discuss, and effectively respond to economic, environmental and social impacts; and show if a process is in place, conducted internally or externally, to ensure the highest governance body's continuing effectiveness."</p>	-	Not Reported
G4-43	Report the measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics.	-	Not Reported
G4-44	<p>"a. Report the processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics. Report whether such evaluation is independent or not, and its frequency. Report whether such evaluation is a self-assessment.b. Report actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics, including, as a minimum, changes in membership and organizational practice.</p> <p>HIGHEST GOVERNANCE BODY'S ROLE IN RISK MANAGEMENT These Standard Disclosures describe whether the highest governance body is accountable for risk management process and its overall effectiveness. The highest governance body's and senior executives' consideration of longer term and broader-reaching risk elements and their integration into strategic planning are important governance disclosures."</p>	-	Not Reported
G4-45	<p>a. Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities. Include the highest governance body's role in the implementation of due diligence processes.</p> <p>b. Report whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental and social impacts, risks, and opportunities.</p>	-	Not Reported
G4-46	Report the highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics.	-	Not Reported
G4-47	"Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities. HIGHEST GOVERNANCE BODY'S ROLE IN SUSTAINABILITY REPORTING These Standard Disclosures show the extent of the highest governance body's involvement in developing and approving the organization's sustainability disclosures, and the degree by which it may be aligned with processes around financial reporting."	-	Not Reported
G4-48	<p>"Report the highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered.</p> <p>HIGHEST GOVERNANCE BODY'S ROLE IN EVALUATING ECONOMIC, ENVIRONMENTAL AND SOCIAL PERFORMANCE</p> <p>These Standard Disclosures show how the highest governance body is involved in monitoring and reacting to the organization's performance for economic, environmental and social topics. Economic, environmental and social performance presents major risks and opportunities that the highest governance body ensures are monitored and addressed, where appropriate. These Standard Disclosures also address the organization's processes for communicating critical concerns to the highest governance body."</p>	-	Not Reported
G4-49	Report the process for communicating critical concerns to the highest governance body.	-	Not Reported
G4-50	<p>"Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them REMUNERATION AND INCENTIVES</p> <p>These Standard Disclosures focus on the remuneration policies established to ensure that remuneration arrangements support the strategic aims of the organization, align with the interests of stakeholders, and enable the recruitment, motivation and retention of members of the highest governance body, senior executives, and employees."</p>	-	Not Reported

G4-51	<p>"a) Report the remuneration policies for the highest governance body and senior executives for the below types of remuneration:</p> <ul style="list-style-type: none"> <li>• Fixed pay and variable pay:</li> <li>• Performance-based pay</li> <li>• Equity-based pay</li> <li>• Bonuses</li> <li>• Deferred or vested shares</li> <li>• Sign-on bonuses or recruitment incentive payments</li> <li>• Termination payments</li> <li>• Clawback</li> <li>• Retirement benefits, including the difference between benefit schemes and contribution rates for the highest governance body, senior executives, and all other employees</li> </ul> <p>b) Report how performance criteria in the remuneration policy relate to the highest governance body's and senior executives' economic, environmental and social objectives."</p>	-	Not Reported
G4-52	Report the process for determining remuneration. Report whether remuneration consultants are involved in determining remuneration and whether they are independent of management. Report any other relationships which the remuneration consultants have with the organization.	-	Not Reported
G4-53	Report how stakeholders' views are sought and taken into account regarding remuneration, including the results of votes on remuneration policies and proposals, if applicable.	-	Not Reported
G4-54	Report the ratio of the annual total compensation for the organization's highest- paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.	-	Not Reported
G4-55	Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country.	-	Not Reported
<b>ETHICS AND INTEGRITY</b>			
G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	16, 17	Fully Reported
G4-57	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.	-	Not Reported
G4-58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistle blowing mechanisms or hotlines.	-	Not Reported

## SPECIFIC STANDARD DISCLOSURES

### CATEGORY: ECONOMIC

MATERIAL ASPECT	INDICATOR NO. AND DESCRIPTION	Page No. of Disclosure	Fully Reported/ Not Reported/ Partially Reported
Economic Performance	<p>"G4-DMA</p> <p>a. Report why the Aspect is material. Report the impacts that make this Aspect material.</p> <p>b. Report how the organization manages the material Aspect or its impacts.</p> <p>c. Report the evaluation of the management approach, including:</p> <ul style="list-style-type: none"> <li>• The mechanisms for evaluating the effectiveness of the management approach</li> <li>• The results of the evaluation of the management approach</li> <li>• Any related adjustments to the management approach" </li></ul>	9, 10	Fully Reported
	Ec1 DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED	38	Fully Reported
	Ec2 FINANCIAL IMPLICATIONS AND OTHER RISKS AND OPPORTUNITIES FOR THE ORGANIZATION'S ACTIVITIES DUE TO CLIMATE CHANGE	38	Fully Reported
	EC3 COVERAGE OF THE ORGANIZATION'S DEFINED BENEFIT PLAN OBLIGATIONS	-	Not Reported
	EC4 FINANCIAL ASSISTANCE RECEIVED FROM GOVERNMENT	-	Not Reported
Market Presence	G4- DMA		
	EC5 RATIOS OF STANDARD ENTRY LEVEL WAGE BY GENDER COMPARED TO LOCAL MINIMUM WAGE AT SIGNIFICANT LOCATIONS OF OPERATION	-	Not Reported
	EC6 PROPORTION OF SENIOR MANAGEMENT HIRED FROM THE LOCAL COMMUNITY AT SIGNIFICANT LOCATIONS OF OPERATION	-	Not Reported



Indirect Economic	G4- DMA Impacts	26, 27, 28	Fully Reported
	Ec7 DEVELOPMENT AND IMPACT OF INFRASTRUCTURE INVESTMENTS AND SERVICES SUPPORTED	26, 27, 28	Fully Reported
	Ec8 SIGNIFICANT INDIRECT ECONOMIC IMPACTS, INCLUDING THE EXTENT OF IMPACTS	26, 27, 28	Fully Reported
Procurement Practices	G4- DMA	29, 30	Fully Reported
	EC9 PROPORTION OF SPENDING ON LOCAL SUPPLIERS AT SIGNIFICANT LOCATIONS OF OPERATION	45	Fully Reported
Availability and Reliability	Eu10 PLANNED CAPACITY AGAINST PROJECTED ELECTRICITY DEMAND OVER THE LONG TERM, BROKEN DOWN BY ENERGY SOURCE AND REGULATORY REGIME	8	Partially Reported
	"G4- DMA- Additional Guidance Management approach to ensure short and long-term electricity availability and reliability"	1	Fully Reported
Demand-Side Management	This sector specific Aspect does not contain Indicators.*	-	Not Applicable
	"G4- DMA-Additional Guidance Demand-side management programs including residential, commercial, institutional and industrial programs"	-	Not Applicable
Research and Development	This sector specific Aspect does not contain Indicators.*	-	Not Applicable
	"G4-DMA Additional Guidance Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development"	-	Not Applicable
Plant Decommissioning	This sector specific Aspect does not contain Indicators.*	-	Not Applicable
	"G4-DMA Additional Guidance Provisions for decommissioning of nuclear power sites"	-	Not Applicable
System Efficiency	G4- DMA	8	Fully Reported
	EU11 AVERAGE GENERATION EFFICIENCY OF THERMAL PLANTS BY ENERGY SOURCE AND BY REGULATORY REGIME	39	Fully Reported
	Eu12 TRANSMISSION AND DISTRIBUTION LOSSES AS A PERCENTAGE OF TOTAL ENERGY	-	Not Applicable
<b>ENVIRONMENT</b>			
Materials	G4- DMA	21, 22, 23	Fully Reported
	En1 MATERIALS USED BY WEIGHT OR VOLUME	33	Fully Reported
	"Additional disclosure requirements Report in-use inventory of solid and liquid high level and low level PCBs contained in equipment."	-	Not Reported
	"G4-DMA Additional Guidance Describe long-term strategy for managing and phasing out high level and low level in-service PCBs."	-	Not Reported
	EN2 PERCENTAGE OF MATERIALS USED THAT ARE RECYCLED INPUT MATERIALS	39	Partially Reported
Energy	G4- DMA	9, 10	Fully Reported
	EN3 ENERGY CONSUMPTION WITHIN THE ORGANIZATION	39	Fully Reported
	EN4 ENERGY CONSUMPTION OUTSIDE OF THE ORGANIZATION	-	Not Reported
	EN5 ENERGY INTENSITY	39	Fully Reported
	EN6 REDUCTION OF ENERGY CONSUMPTION	39	Fully Reported
	EN7 REDUCTIONS IN ENERGY REQUIREMENTS OF PRODUCTS AND SERVICES	-	Not Reported

Water	G4- DMA	21, 22, 23	Fully Reported
	EN8 TOTAL WATER WITHDRAWAL BY SOURCE	33	Fully Reported
	"Additional disclosure requirements Report overall water usage for processing, cooling and consumption in thermal and nuclear power plants, including use of water in ash handling and coal cleaning."	-	Not Reported
	"G4-DMA Additional Guidance At the watershed or hydrological basin level, include collaborative approaches to managing watersheds and reservoirs for multiple uses (e.g., irrigation, drinking water, ecosystem conservation, etc.). Also report long-term planning for securing water resources, for meeting the needs of both the utility and other stakeholders (e.g. local communities). This includes describing the criteria for managing maximum/minimum flow of surface water and volume of ground water and how these are determined and maintained."	-	Not Reported
	EN9 WATER SOURCES SIGNIFICANTLY AFFECTED BY WITHDRAWAL OF WATER	-	Not Reported
	EN10 PERCENTAGE AND TOTAL VOLUME OF WATER RECYCLED AND REUSED	33	Fully Reported
Biodiversity	G4- DMA	21, 22, 23	Fully Reported
	EN11 OPERATIONAL SITES OWNED, LEASED, MANAGED IN, OR ADJACENT TO, PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS.	-	Not Reported
	En12 DESCRIPTION OF SIGNIFICANT IMPACTS OF ACTIVITIES, PRODUCTS, AND SERVICES ON BIODIVERSITY IN PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS	-	Not Reported
	"Additional disclosure requirements Report the nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following: a. Maintenance of transmission line corridors b. Fragmentation and isolation (islandization) c. Impacts of thermal discharge"	-	Not Applicable
	"G4-DMA Additional Guidance Report approaches for pest and vegetation management along transmission and distribution corridors (e.g., use of Integrated Pest Management and Integrated Vegetation Management). Report the approaches to assess impacts (including fragmentation and isolation), develop mitigation measures and monitor residual effects at new and existing sites on the following: • Forested areas (e.g., alterations to tree crown density, loss of indigenous species); • Landscape (e.g., impacts of wind farms, transmission lines); and • Marine, freshwater and wetland ecosystems (e.g., downstream water quality including turbidity, sedimentation, siltation and water quality of reservoir and other water bodies). Assessment and mitigation should consider conservation plans for indigenous species, alterations in the migration, breeding, or habitat of animals (e.g., fish passage) from the reporting organization's infrastructure (e.g., power lines and dams)."	-	Not Applicable
	EN13 HABITATS PROTECTED OR RESTORED	-	Not Reported
	En14 TOTAL NUMBER OF IUCN RED LIST SPECIES AND NATIONAL CONSERVATION LIST SPECIES WITH HABITATS IN AREAS AFFECTED BY OPERATIONS, BY LEVEL OF EXTINCTION RISK	-	Not Reported
	Eu13 BIODIVERSITY OF OFFSET HABITATS COMPARED TO THE BIODIVERSITY OF THE AFFECTED AREAS	-	Not Reported
Emissions	G4- DMA	21, 22, 23	Fully Reported
	En15 DIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 1)	37	Fully Reported
	"Additional disclosure requirements Report CO <sub>2</sub> e per MWh, broken down by regulatory regime, for: Net generation from all generating capacity; Net generation from all fossil fuel generation; and Estimated net delivery to end users. This includes emissions from own generation."	37	Fully Reported
	En16 ENERGY INDIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 2)	-	Not Applicable
	"Additional disclosure requirements Report CO <sub>2</sub> e per MWh, broken down by regulatory regime, for: Estimated net delivery to end users. This includes emissions from purchased power."	-	Not Applicable
	EN17 OTHER INDIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 3)	-	Not Reported
	EN18 GREENHOUSE GAS (GHG) EMISSIONS INTENSITY	37	Fully Reported

	EN19 REDUCTION OF GREENHOUSE GAS (GHG) EMISSIONS	37	Fully Reported
	EN20 EMISSIONS OF OZONE-DEPLETING SUBSTANCES (ODS)	37	Fully Reported
	En21 NO, SO, AND OTHER SIGNIFICANT AIR EMISSIONS	37	Fully Reported
	"Additional disclosure requirements Report emissions per MWh for: Net generation from all generating capacity; Net generation from all combustion power plants;"	39	Fully Reported
	"Additional disclosure requirements Report emissions per MWh for: Net generation from all generating capacity; Net generation from all combustion power plants;"	39	Fully Reported
Effluents and Waste	G4- DMA	22, 23	Fully Reported
	En22 TOTAL WATER DISCHARGE BY QUALITY AND DESTINATION	33	Fully Reported
	"Additional disclosure requirements Include thermal discharges as part of the total volume of planned and unplanned water discharges."	-	Not Reported
	"G4-DMA Additional Guidance Describe the management strategy and storage methods for different types of radioactive nuclear waste, including: • Temporary and permanent storage; • Environmental, health and safety impacts of radioactive nuclear waste; and • Security measures according to the applicable management standards/legislative framework."	34	Fully Reported
	EN23 TOTAL WEIGHT OF WASTE BY TYPE AND DISPOSAL METHOD	34	Fully Reported
	"Additional disclosure requirements Include PCB waste as part of the total weight of hazardous and non-hazardous waste."	-	Not Reported
	EN24 TOTAL NUMBER AND VOLUME OF SIGNIFICANT SPILLS	-	Not Applicable
	EN25 WEIGHT OF TRANSPORTED, IMPORTED, EXPORTED, OR TREATED WASTE DEEMED HAZARDOUS UNDER THE TERMS OF THE BASEL CONVENTION <sup>2</sup> ANNEX I, II, III, AND VIII, AND PERCENTAGE OF TRANSPORTED WASTE SHIPPED INTERNATIONALLY	-	Not Applicable
	EN26 IDENTITY, SIZE, PROTECTED STATUS, AND BIODIVERSITY VALUE OF WATER BODIES AND RELATED HABITATS SIGNIFICANTLY AFFECTED BY THE ORGANIZATION'S DISCHARGES OF WATER AND RUNOFF	-	Not Reported
Products and Services	G4- DMA	-	Not Reported
	En27 EXTENT OF IMPACT MITIGATION OF ENVIRONMENTAL IMPACTS OF PRODUCTS AND SERVICES	-	Not Reported
	En28 PERCENTAGE OF PRODUCTS SOLD AND THEIR PACKAGING MATERIALS THAT ARE RECLAIMED BY CATEGORY	-	Not Reported
Compliance	G4- DMA	-	Not Reported
	En29 MONETARY VALUE OF SIGNIFICANT FINES AND TOTAL NUMBER OF NON-MONETARY SANCTIONS FOR NON-COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS	Nil	Fully Reported
Transport	G4- DMA	-	Not Reported
	En30 SIGNIFICANT ENVIRONMENTAL IMPACTS OF TRANSPORTING PRODUCTS AND OTHER GOODS AND MATERIALS FOR THE ORGANIZATION'S OPERATIONS, AND TRANSPORTING MEMBERS OF THE WORKFORCE	-	Not Applicable
Overall	G4- DMA	23	Fully Reported
	En31 TOTAL ENVIRONMENTAL PROTECTION EXPENDITURES AND INVESTMENTS BY TYPE	35	Fully Reported
Supplier Environmental Assessment	G4- DMA	29, 30	Partially Reported
	EN32 PERCENTAGE OF NEW SUPPLIERS THAT WERE SCREENED USING ENVIRONMENTAL CRITERIA	45	Partially Reported
	En33 SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE ENVIRONMENTAL IMPACTS IN THE SUPPLY CHAIN AND ACTIONS TAKEN	-	Not Reported

Environmental Grievance Mechanisms	G4- DMA	-	Not Reported
	En34 NUMBER OF GRIEVANCES ABOUT ENVIRONMENTAL IMPACTS FILED, ADDRESSED, AND RESOLVED THROUGH FORMAL GRIEVANCE MECHANISMS	Nil	Fully Reported
<b>SOCIAL</b>			
Sub- Category: Labor Practices and Decent Work			
Employment	G4- DMA	18, 19, 20	Fully Reported
	LA1 TOTAL NUMBER AND RATES OF NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER BY AGE GROUP, GENDER AND REGION	41	Partially Reported
	"Additional disclosure requirements For the employees leaving employment during the reporting period, provide the average length of tenure of employees leaving broken down by gender and age group."	41	Fully Reported
	"G4-DMA Additional Guidance Programs and processes to ensure the availability of a skilled workforce Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors "	19, 20, 24	Fully Reported
	EU15 PERCENTAGE OF EMPLOYEES ELIGIBLE TO RETIRE IN THE NEXT 5 AND 10 YEARS BROKEN DOWN BY JOB CATEGORY AND BY REGION	43	Fully Reported
	EU17 DAYS WORKED BY CONTRACTOR AND SUBCONTRACTOR EMPLOYEES INVOLVED IN CONSTRUCTION, OPERATION & MAINTENANCE ACTIVITIES	31	Fully Reported
	EU18 PERCENTAGE OF CONTRACTOR AND SUBCONTRACTOR EMPLOYEES THAT HAVE UNDERGONE RELEVANT HEALTH AND SAFETY TRAINING	31, 32	Fully Reported
Labor/ Management Relations	G4. DMA	18, 19, 20	Fully Reported
	LA2 BENEFITS PROVIDED TO FULL-TIME EMPLOYEES THAT ARE NOT PROVIDED TO TEMPORARY OR PART-TIME EMPLOYEES, BY SIGNIFICANT LOCATIONS OF OPERATION	-	Not Reported
	LA3 RETURN TO WORK AND RETENTION RATES AFTER PARENTAL LEAVE, BY GENDER	41	Fully Reported
	LA4 MINIMUM NOTICE PERIODS REGARDING OPERATIONAL CHANGES, INCLUDING WHETHER THESE ARE SPECIFIED IN COLLECTIVE AGREEMENTS	-	Not Reported
Occupational Health and Safety	G4- DMA	24, 25	Fully Reported
	LA5 PERCENTAGE OF TOTAL WORKFORCE REPRESENTED IN FORMAL JOINT MANAGEMENT-WORKER HEALTH AND SAFETY COMMITTEES THAT HELP MONITOR AND ADVISE ON OCCUPATIONAL HEALTH AND SAFETY PROGRAMS	31, 32	Fully Reported
	LA6 TYPE OF INJURY AND RATES OF INJURY, OCCUPATIONAL DISEASES, LOST DAYS, AND ABSENTEEISM, AND TOTAL NUMBER OF WORK-RELATED FATALITIES, BY REGION AND BY GENDER	31, 32	Fully Reported
	"Additional disclosure requirements Report on health and safety performance of contractors and subcontractors working onsite or on behalf of the reporting organization off site."	31, 32	Fully Reported
	LA7 WORKERS WITH HIGH INCIDENCE OR HIGH RISK OF DISEASES RELATED TO THEIR OCCUPATION	-	Not Reported
	LA8 HEALTH AND SAFETY TOPICS COVERED IN FORMAL AGREEMENTS WITH TRADE UNIONS	-	Not Reported
Training and Education	G4- DMA	18, 19, 20	Fully Reported
	LA9 AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE BY GENDER, AND BY EMPLOYEE CATEGORY	44	Fully Reported
	LA10 PROGRAMS FOR SKILLS MANAGEMENT AND LIFELONG LEARNING THAT SUPPORT THE CONTINUED EMPLOYABILITY OF EMPLOYEES AND ASSIST THEM IN MANAGING CAREER ENDINGS	18, 19, 20	Fully Reported
	LA11 PERCENTAGE OF EMPLOYEES RECEIVING REGULAR PERFORMANCE AND CAREER DEVELOPMENT REVIEWS, BY GENDER AND BY EMPLOYEE CATEGORY	18, 19, 20	Fully Reported

Diversity and Equal Opportunity	G4- DMA	18, 19, 20	Fully Reported
	LA12 COMPOSITION OF GOVERNANCE BODIES AND BREAKDOWN OF EMPLOYEES PER EMPLOYEE CATEGORY ACCORDING TO GENDER, AGE GROUP, MINORITY GROUP MEMBERSHIP, AND OTHER INDICATORS OF DIVERSITY	40, 41, 42	Partially Reported
Equal Remuneration for Women and Men	G4- DMA	18, 19, 20	Fully Reported
	LA13 RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN TO MEN BY EMPLOYEE CATEGORY, BY SIGNIFICANT LOCATIONS OF OPERATION	43	Fully Reported
Supplier Assessment for Labor Practices	G4- DMA	29, 30	Fully Reported
	LA14 PERCENTAGE OF NEW SUPPLIERS THAT WERE SCREENED USING LABOR PRACTICES CRITERIA	-	Not Reported
	LA15 SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE IMPACTS FOR LABOR PRACTICES IN THE SUPPLY CHAIN AND ACTIONS TAKEN	-	Not Reported
Labor Practices Grievance Mechanisms	G4- DMA	19, 20	Partially Reported
	LA16 NUMBER OF GRIEVANCES ABOUT LABOR PRACTICES FILED, ADDRESSED, AND RESOLVED THROUGH FORMAL GRIEVANCE MECHANISMS	-	Not Reported
Sub- Category: Human Rights			
Investment	G4- DMA	-	Not Reported
	HR1 TOTAL NUMBER AND PERCENTAGE OF SIGNIFICANT INVESTMENT AGREEMENTS AND CONTRACTS THAT INCLUDE HUMAN RIGHTS CLAUSES OR THAT UNDERWENT HUMAN RIGHTS SCREENING	-	Not Reported
	HR2 TOTAL HOURS OF EMPLOYEE TRAINING ON HUMAN RIGHTS POLICIES OR PROCEDURES CONCERNING ASPECTS OF HUMAN RIGHTS THAT ARE RELEVANT TO OPERATIONS, INCLUDING THE PERCENTAGE OF EMPLOYEES TRAINED	-	Not Reported
Non-discrimination	G4- DMA	19	Partially Reported
	HR3 TOTAL NUMBER OF INCIDENTS OF DISCRIMINATION AND CORRECTIVE ACTIONS TAKEN	Nil	Fully Reported
Freedom of Association and Collective Bargaining	HR4 OPERATIONS AND SUPPLIERS IDENTIFIED IN WHICH THE RIGHT TO EXERCISE FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING MAY BE VIOLATED OR AT SIGNIFICANT RISK, AND MEASURES TAKEN TO SUPPORT THESE RIGHTS	-	Not Reported
	"G4-DMA Additional Guidance Report on management mechanisms to address the right to organize, right to bargain and right to strike or instances of lock out, given the context of the industry's need to ensure continuous provision of essential services. Where the right to strike does not exist or is limited, report on remedial measures such as binding arbitration. Where freedom of association or expression are limited or prevented by regulatory regime, report on mechanisms and processes that exist for getting employee input on conditions of employment."	-	Not Applicable
Child Labor	G4- DMA	29, 30	Partially Reported
	HR5 OPERATIONS AND SUPPLIERS IDENTIFIED AS HAVING SIGNIFICANT RISK FOR INCIDENTS OF CHILD LABOR, AND MEASURES TAKEN TO CONTRIBUTE TO THE EFFECTIVE ABOLITION OF CHILD LABOR	-	Not Reported
Forced or Compulsory Labor	G4- DMA	29, 30	Partially Reported
	HR6 OPERATIONS AND SUPPLIERS IDENTIFIED AS HAVING SIGNIFICANT RISK FOR INCIDENTS OF FORCED OR COMPULSORY LABOR, AND MEASURES TO CONTRIBUTE TO THE ELIMINATION OF ALL FORMS OF FORCED OR COMPULSORY LABOR	-	Not Reported

Security Practices	G4- DMA	-	Not Reported
	HR7 PERCENTAGE OF SECURITY PERSONNEL TRAINED IN THE ORGANIZATION'S HUMAN RIGHTS POLICIES OR PROCEDURES THAT ARE RELEVANT TO OPERATIONS	-	Not Reported
Indigenous Rights	G4- DMA	-	Not Reported
	HR8 TOTAL NUMBER OF INCIDENTS OF VIOLATIONS INVOLVING RIGHTS OF INDIGENOUS PEOPLES AND ACTIONS TAKEN	-	Not Reported
Assessment	G4- DMA	-	Not Reported
	HR9 TOTAL NUMBER AND PERCENTAGE OF OPERATIONS THAT HAVE BEEN SUBJECT TO HUMAN RIGHTS REVIEWS OR IMPACT ASSESSMENTS	-	Not Reported
Supplier Human Rights Assessment	G4- DMA	29, 30	Partially Reported
	HR10 PERCENTAGE OF NEWSUPPLIERS THAT WERE SCREENED USING HUMAN RIGHTS CRITERIA	-	Not Reported
	HR11 SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE HUMAN RIGHTS IMPACTS IN THE SUPPLY CHAIN AND ACTIONS TAKEN	-	Not Reported
Human Rights Grievance Mechanisms	G4- DMA	-	Not Reported
	HR12 NUMBER OF GRIEVANCES ABOUT HUMAN RIGHTS IMPACTS FILED, ADDRESSED, AND RESOLVED THROUGH FORMAL GRIEVANCE MECHANISMS	Nil	Fully Reported
Sub Category: Society			
Local Communities	G4- DMA	26, 27, 28	Fully Reported
	SO1 PERCENTAGE OF OPERATIONS WITH IMPLEMENTED LOCAL COMMUNITY ENGAGEMENT, IMPACT ASSESSMENTS, AND DEVELOPMENT PROGRAMS	26, 27	Fully Reported
	SO2 OPERATIONS WITH SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE IMPACTS ON LOCAL COMMUNITIES	-	Not Reported
	EU22 NUMBER OF PEOPLE PHYSICALLY OR ECONOMICALLY DISPLACED AND COMPENSATION, BROKEN DOWN BY TYPE OF PROJECT	-	Not Reported
	"G4-DMA Additional Guidance Stakeholder participation in decision making processes related to energy planning and infrastructure development Approach to managing the impacts of displacement Report whether the organization's programs for managing community impacts have been effective in mitigating negative impacts and maximizing positive impacts, including the scale of persons affected."	-	Not Reported
Anti-corruption	G4- DMA	18	Fully Reported
	SO3 TOTAL NUMBER AND PERCENTAGE OF OPERATIONS ASSESSED FOR RISKS RELATED TO CORRUPTION AND THE SIGNIFICANT RISKS IDENTIFIED	-	Not Reported
	SO4 COMMUNICATION AND TRAINING ON ANTI-CORRUPTION POLICIES AND PROCEDURES	44	Partially Reported
	SO5 CONFIRMED INCIDENTS OF CORRUPTION AND ACTIONS TAKEN	-	Not Reported
Public Policy	G4, DMA	-	Not Reported
	SO6 TOTAL VALUE OF POLITICAL CONTRIBUTIONS BY COUNTRY AND RECIPIENT/BENEFICIARY	-	Not Applicable
Anti-competitive Behavior	G4, DMA	-	Not Reported
	SO7 TOTAL NUMBER OF LEGAL ACTIONS FOR ANTI-COMPETITIVE BEHAVIOR, ANTI-TRUST, AND MONOPOLY PRACTICES AND THEIR OUTCOMES	-	Not Applicable
Compliance	G4, DMA	-	Not Reported
	SO8 MONETARY VALUE OF SIGNIFICANT FINES AND TOTAL NUMBER OF NON-MONETARY SANCTIONS FOR NON-COMPLIANCE WITH LAWS AND REGULATIONS	Nil	Fully Reported

Supplier Assessment for Impacts on Society	G4, DMA	29, 30	Fully Reported
	SO9 PERCENTAGE OF NEW SUPPLIERS THAT WERE SCREENED USING CRITERIA FOR IMPACTS ON SOCIETY	-	Not Reported
	SO10 SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE IMPACTS ON SOCIETY IN THE SUPPLY CHAIN AND ACTIONS TAKEN	-	Not Reported
Grievance Mechanisms for Impacts on Society	G4, DMA	-	Not Reported
	SO11 NUMBER OF GRIEVANCES ABOUT IMPACTS ON SOCIETY FILED, ADDRESSED, AND RESOLVED THROUGH FORMAL GRIEVANCE MECHANISMS	-	Not Reported
Disaster/ Emergency Planning and Response	This sector specific Aspect does not contain Indicators.*	-	Not Reported
	"G4-DMA Additional Guidance Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans"	-	Not Reported
Sub- Category: Product Responsibility			
Customer Health and Safety	G4- DMA	-	Not Applicable
	PR1 PERCENTAGE OF SIGNIFICANT PRODUCT AND SERVICE CATEGORIES FOR WHICH HEALTH AND SAFETY IMPACTS ARE ASSESSED FOR IMPROVEMENT	-	Not Applicable
	PR2 TOTAL NUMBER OF INCIDENTS OF NON-COMPLIANCE WITH REGULATIONS AND VOLUNTARY CODES CONCERNING THE HEALTH AND SAFETY IMPACTS OF PRODUCTS AND SERVICES DURING THEIR LIFE CYCLE, BY TYPE OF OUTCOMES	-	Not Reported
	EU25 NUMBER OF INJURIES AND FATALITIES TO THE PUBLIC INVOLVING COMPANY ASSETS, INCLUDING LEGAL JUDGMENTS, SETTLEMENTS AND PENDING LEGAL CASES OF DISEASES	Nil	Fully Reported
	"G4-DMA Additional Guidance For electric utilities the following categories should also be assessed <ul style="list-style-type: none"> <li>• Resource planning</li> <li>• Generation</li> <li>• Transmission</li> <li>• Distribution</li> <li>• Use</li> </ul> State the processes for assessing community health risks including monitoring, prevention measures and, if applicable, long term health- related studies. Identify community health risks that are assessed such as: Compliance with exposure limit(s) to electric fields (in kV per m) and magnetic fields (in $\mu$ T) where available, for members of the public and employees in the areas in which the reporting organization operates."	-	Not Applicable
Product and Service Labeling	G4, DMA	-	Not Applicable
	PR3 TYPE OF PRODUCT AND SERVICE INFORMATION REQUIRED BY THE ORGANIZATION'S PROCEDURES FOR PRODUCT AND SERVICE INFORMATION AND LABELING, AND PERCENTAGE OF SIGNIFICANT PRODUCT AND SERVICE CATEGORIES SUBJECT TO SUCH INFORMATION REQUIREMENTS	-	Not Applicable
	PR4 TOTAL NUMBER OF INCIDENTS OF NON-COMPLIANCE WITH REGULATIONS AND VOLUNTARY CODES CONCERNING PRODUCT AND SERVICE INFORMATION AND LABELING, BY TYPE OF OUTCOMES	-	Not Applicable
	PR5 RESULTS OF SURVEYS MEASURING CUSTOMER SATISFACTION	-	Not Applicable



Marketing Communica- tions	G4, DMA	-	Not Applicable
	PR6 SALE OF BANNED OR DISPUTED PRODUCTS	-	Not Applicable
	PR7 TOTAL NUMBER OF INCIDENTS OF NON-COMPLIANCE WITH REGULATIONS AND VOLUNTARY CODES CONCERNING MARKETING COMMUNICATIONS, INCLUDING ADVERTISING, PROMOTION, AND SPONSORSHIP, BY TYPE OF OUTCOMES	-	Not Applicable
Customer Privacy	G4, DMA	-	Not Applicable
	PR8 TOTAL NUMBER OF SUBSTANTIATED COMPLAINTS REGARDING BREACHES OF CUSTOMER PRIVACY AND LOSSES OF CUSTOMER DATA	-	Not Applicable
Compliance	G4, DMA	-	Not Applicable
	PR9 MONETARY VALUE OF SIGNIFICANT FINES FOR NON-COMPLIANCE WITH LAWS AND REGULATIONS CONCERNING THE PROVISION AND USE OF PRODUCTS AND SERVICES	-	Not Applicable
Access	"G4-DMA Additional Guidance Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services"	-	Not Applicable
	EU26 PERCENTAGE OF POPULATION UNSERVED IN LICENSED DISTRIBUTION OR SERVICE AREAS	-	Not Applicable
	EU27 NUMBER OF RESIDENTIAL DISCONNECTIONS FOR NON-PAYMENT, BROKEN DOWN BY DURATION OF DISCONNECTION AND BY REGULATORY REGIME	-	Not Applicable
	EU28 POWER OUTAGE FREQUENCY	39	Fully Reported
	EU29 AVERAGE POWER OUTAGE DURATION	-	Not Reported
	EU30 AVERAGE PLANT AVAILABILITY FACTOR BY ENERGY SOURCE AND BY REGULATORY REGIME	39	Fully Reported
Provision of Information	This sector specific Aspect does not contain Indicators.*	-	Not Applicable
	"G4-DMA Additional Guidance Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services"	-	Not Applicable

# Mapping Sustainable Development Goals (SDGs) in Our Activities

For the purpose of this report we have identified the Sustainable Development Goals most relevant to our operations, business strategy and Corporate Social Responsibility initiatives. Information on what OPGC is doing to address these goals can be found in the respective pages.

Logo	SDG#	Theme	Goal	Page No.
	SDG1	No Poverty	End poverty in all its forms everywhere	27, 38
	SDG2	Zero Hunger	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	27, 38
	SDG3	Good Health and Well-being	Ensure healthy lives and promote well-being for all at all ages	27, 38
	SDG4	Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	27, 38
	SDG5	Gender Equality	Achieve gender equality and empower all women and girls	19
	SDG6	Clean Water	Ensure availability and sustainable management of water and sanitation for all	22
	SDG7	Affordable and Clean Energy	Ensure access to affordable, reliable, sustainable and modern energy for all	9, 10
	SDG8	Decent Work and Economic Growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	9, 10, 18, 19, 20
	SDG9	Industry, Innovation and Infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9, 10, 27
	SDG10	Reduce Inequalities	Reduce inequality within and among countries	19, 20
	SDG11	Sustainable Cities & Communities	Make cities and human settlements inclusive, safe, resilient and sustainable	24, 25, 26
	SDG13	Climate Action	Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy	21, 22, 23
	SDG17	Partnerships to Achieve the Goal	Strengthen the means of implementation and revitalize the global partnership for sustainable development	1, 2, 3, 4, 5, 6



## ODISHA POWER GENERATION CORPORATION LIMITED

(A Government Company of the State of Odisha)



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