

# TASK FORCE ON CLIMATE RELATED FINANCIAL DISCLOSURES

# **RE SUSTAINABILITY LIMITED**

TCFD REPORT

(FY 2024-25)



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# 1. About the Company

Re Sustainability Limited (ReSL) is India's largest waste management and resource recovery company leading the way in shaping a circular economy within the nation and abroad. Since our inception in 1994, we have pioneered a diverse array of solutions in integrated resource management, spanning Municipal Waste Management, Industrial Waste Management, Biomedical Waste Management, Recycling (Construction and Demolition Waste, Plastic Waste, E-waste, and End of Life Vehicles etc.), Common Effluent Treatment Plants, Integrated Sustainability Solutions, Facilities Management, Car Park Management, among others. We have set our sights on shaping a future with no waste, a challenge we strive to address by harnessing ReSL's global expertise, cutting edge technology, and leading industry research.

ReSL's comprehensive portfolio of end-to-end environmental solutions addresses the waste management requirements of Indian and international organizations, including prominent municipal bodies, government agencies, and numerous private and public companies in industries as diverse as Automotive, Healthcare, Construction, Oil & Gas, Steel & Metals, and Power Generation. Powered by our commitment to customer satisfaction and consistent performance, we have earned their trust, making us their go-to partner for sustainability solutions.

ReSL's strategy is built on three interconnected pillars that work in harmony to promote the well-being of people and the planet, while also driving business profitability. These core pillars are underpinned by a steadfast dedication to operational and digital excellence, which together fuel ReSL's continued growth and strengthen its role as a key driver of the circular economy.



Sustainability Impact

@ Scale



Inclusion, Innovation, and Partnerships



Great Place to Work

At ReSL, sustainability is central to our corporate philosophy, influencing every aspect of our operations. We recognize the importance of waste management in conserving resources and protecting the environment. Sustainability at ReSL is anchored in three strategic pillar - Business Ecosystem, People, and the Environment. Each pillar is guided by specific objectives and a clear roadmap, collectively advancing the Sustainable Development Goals (SDGs). This integrated approach reflects ReSL's deep commitment to sustainability and environmental excellence.

# 2. About the Report

This report has been prepared in alignment with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and focuses on ReSL's facilities units within its India operations. It outlines the use of scenario analysis to assess the resilience of these facilities against both physical and transition risks. The primary objective of this report is to evaluate the potential impacts of climate-related risks and opportunities associated with the transition to a low-carbon future.



Figure 1: ReSL Presence in India

This report presents an overview of how evolving climate conditions may influence ReSL's operations and highlights the company's proactive measures to counteract these effects and maintain operational stability. ReSL continues to refine its approach as its awareness of environmental challenges grows, regularly revisiting and enhancing its strategies.

The organization recognizes the vital link between ethical business conduct and ecological well-being, understanding that climate dynamics play a crucial role in shaping its future. Although the central theme of this report revolves around ReSL's initiatives to manage industry specific risks both those arising from systemic shifts and those caused by direct environmental impacts the company is equally committed to tackling climate change at its origin. In pursuit of a more sustainable future, ReSL consistently implements initiatives and programs aimed at minimizing its environmental footprint.

### 3. About the TCFD

The Financial Stability Board (FSB) serves as a global organization that oversees and advises on the stability of the international financial landscape. To enhance transparency around climate-related financial risks, the FSB initiated the Task Force on Climate-related Financial Disclosures (TCFD), a group driven by industry experts. The TCFD aims to create reporting standards that help stakeholders grasp how climate risks and opportunities can influence financial performance.

The TCFD framework is built around four essential pillars that reflect key aspects of organizational functioning: governance, strategic planning, risk oversight, and performance indicators and goals. These foundational recommendations are complemented by specific climate-related disclosures, offering detailed insights that assist investors and other stakeholders in evaluating how companies identify and respond to climate-related challenges.



**Governance:** The organization's governance around climate-related risks and opportunities

**Strategy:** The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning

Risk Management: The processes used by the organization to identify, assess, and manage climate-related risks.

Metrics and Targets: The metrics and targets used to assess and manage relevant climate-related risks and opportunities.

Figure 2: Core elements of recommended climate-related financial disclosures

## 4. Governance

ReSL's board holds the primary responsibility for guiding the company's sustainability vision and long-term environmental goals. Board members are instrumental in evaluating climate-related risks and integrating sustainability into the company's strategic framework.

The board oversees the company's direction on climate matters through a structured governance model. Several specialized committees including the Audit Committee, Nomination and Remuneration Committee, Corporate Social Responsibility (CSR) Committee, Environment Social Governance (ESG) Committee, Executive Board Committee, and Risk Management Committee play key roles in monitoring and steering the organization's activities.

Strategic discussions on climate initiatives are held at least annually during board meetings, ensuring that environmental considerations are embedded across all levels of decision-making. The ESG Committee works in tandem with the Risk Management Committee to track, evaluate, and respond to climate-related threats.

ReSL places strong emphasis on ethical governance as a foundation for achieving its mission, with a focus on stakeholder value. The company's governance philosophy is rooted in integrity, regulatory compliance, and industry best practices. To ensure robust climate and sustainability oversight, ReSL has established dedicated committees at the board, corporate, and operational levels.

#### Board and management oversight of climate-related risks and opportunities

Our sustainability goals are steered by a robust governance framework at the board level, with following key positions/committees dedicated to addressing climate-related issues. ESG Committee will commence once in a year at least to discuss organisation sustainability related activities including climate related issues.

Positions/Committee	Responsibilities for climate-related issues
Board-level committee (ESG Committee)	<ul> <li>ESG Committee oversees ReSL's sustainability, led by an independent director with expertise and Providing strategic oversight and proactive management of climate-related issues</li> <li>Drives commitment to environmental sustainability, covering climate change, employee well-being, governance, reputation, and diversity.</li> <li>Climate-related matters addressed in ESG committee meetings and various forums like annual budgeting and risk management discussions.</li> </ul>

Director on board	<ul> <li>ESG Committee Chair (Independent Director) provides leadership, oversees goal progress, assesses, and mitigates risks.</li> <li>Actively engages stakeholders, fostering open communication on environmental sustainability, social impact, and governance.</li> <li>Contributions drive the organization's commitment to sustainable practices.</li> </ul>
Managing Director and Chief Executive Officer (CEO)	<ul> <li>CEO manages climate budgets, oversees low-carbon initiatives, and plays a key role in climate-related transactions.</li> <li>Formulates ESG strategy aligned with sustainability goals, establishes climate-related incentives, and tracks progress.</li> <li>Actively participates in policy discussions and ensures hands-on implementation of effective ESG practices company wide.</li> <li>Integrates climate into corporate strategy, sets targets, and monitors progress.</li> <li>Handles climate-related acquisitions, mergers, and divestitures</li> </ul>
Vice President and Head - Sustainability & Innovation	<ul> <li>Responsible for climate related issues and assesses climate risks/opportunities for resilience and sustainable growth</li> <li>Manages budgets for climate mitigation and low-carbon products.</li> <li>Leads the climate transition plan and ensures ESG roadmap implementation.</li> <li>Manages value chain engagement for effective climate-related practices.</li> </ul>

Table 1: Board level positions/committees and Management responsible for addressing climate-related issues

#### Climate related incentives

Our company is dedicated to promoting environmentally friendly practices through a comprehensive incentive program. We believe in rewarding our corporate executive team, business unit managers, and facility managers for their outstanding contributions to our climate-related objectives. The corporate executive team receives financial incentives for successfully increasing the adoption of low-carbon energy, reducing overall energy consumption, and encouraging investments in low-carbon research. Business unit managers play a crucial role, and we motivate them with monetary rewards for implementing effective emission reduction initiatives and enhancing energy efficiency. We also encourage them to promote the use of low-carbon and renewable source. Additionally, we incentivize them to boost revenue from low-carbon products and services. Employees are acknowledged for their proactive efforts in addressing climate-related challenges. We recognize their commitment to improving energy efficiency and reducing consumption across various facilities.

# 5. Strategy

#### ReSL's climate risk and opportunity assessment across time horizons

ReSL has undertaken a thorough analysis of climate-related risks and opportunities across three distinct timeframes: short-term (up to 2030), medium-term (2030–2040), and long-term (beyond 2040). These evaluations are guided by multiple climate scenarios using Representative Concentration Pathways (RCPs), which include RCP 2.6 (best case scenario), RCP 4.5 and RCP 6.0 (intermediate and business-as-usual scenarios), and RCP 8.5 (worst case scenario). This scenario-based approach helps ReSL anticipate and prepare for a range of climate futures.

ReSL has identified a broad spectrum of climate-related risks that could influence its operations and strategic direction. Physical risks include the increasing frequency and severity of climate events such as floods, droughts, cyclones, and heatwaves. These events pose threats to infrastructure, supply chains, and workforce safety, potentially leading to operational disruptions and increased recovery costs. Long-term physical impacts such as rising sea levels, persistent water stress, and land degradation may also compromise the viability of certain locations and assets, requiring significant adaptation measures.

In parallel, transition risks arise from the evolving policy and regulatory landscape, including stricter environmental laws, standards, and the introduction of carbon pricing mechanisms. These changes can lead to increased compliance costs and shifts in market dynamics. ReSL also faces reputational risks as stakeholders demand greater transparency and action on sustainability. Additionally, the rapid pace of technological advancement presents a risk if the organization fails to adopt low-carbon innovations in time, potentially affecting competitiveness and alignment with global climate goals.

In response to these risks, ReSL has identified several opportunities to strengthen its sustainability performance and resilience. These include transitioning to electric vehicles, enhancing waste recovery, biomethanization, improving energy efficiency across operations, and pursuing ISO 50001 certification for major sites. The organization is also focused on reinforcing governance and stakeholder engagement through its Environmental, Social, and Governance (ESG) initiatives, ensuring that climate considerations are integrated into decision-making at all levels.

#### Impact on Business, Strategy, and Financial Planning

Climate-related risks and opportunities significantly shape ReSL's operations, strategic planning, and financial decisions. ReSL incorporates climate considerations into its long-term strategy using scenario-based modelling for key milestones in 2030, 2040, and 2050 to ensure alignment with sustainability goals. ReSL has developed a resilient climate strategy that remains effective across multiple future scenarios, including those aligned with a 2°C pathway. In a low-carbon future (RCP 2.6), the company is well-prepared through initiatives like transport electrification, waste-to-energy programs, and energy efficiency systems, which help reduce regulatory and reputational risks. For more severe climate scenarios (RCP 4.5 to 8.5), ReSL has assessed the impact of extreme weather events and implemented mitigation measures such as infrastructure upgrades and site-level risk assessments. The strategy incorporates IPCC RCP scenarios for physical risks and IEA announced pledges, NGFS framework for below and above 2 degrees for transition risks, ensuring adaptability and long-term sustainability.

Financial impacts from various risks have been assessed through stakeholder discussions and risk ratings under Enterprise Risk Management (ERM) framework. Physical risks such as heatwaves

and heavy rainfall are considered high-likelihood events with significant financial consequences. On the regulatory side, the potential introduction of carbon pricing in India could materially affect ReSL's operations. Evolving regulations may also increase reporting obligations for businesses.

ReSL also sees strategic opportunities in transitioning to a low-carbon economy. The growing demand for recycled and upcycled products is creating expansion opportunities for ReSL. The rise in green buildings has driven consistent demand for recycled materials like paver blocks and kerb stones made from Construction and Demolition (C&D) waste. Recovered sand and aggregates are increasingly used in non-load bearing construction. Additionally, stricter regulations on cement and related industries requiring the use of Alternative Fuels and Raw Materials (AFR) and Refused Derived fuel (RDF) are boosting demand for 's production capabilities, paving the way for new facility development.

# 6. Risk Management

At ReSL, we view risk management as a strategic enabler for value creation. Our comprehensive approach involves systematically identifying risks, evaluating their business impact, prioritizing them, and implementing effective management and mitigation strategies. We proactively address a broad spectrum of risks stemming from both internal and external environments, including business dynamics, economic shifts, regulatory changes, environmental challenges, and social factors.

We acknowledge the complexities of our operational landscape, which is shaped by intense market competition, rapid technological evolution, data privacy concerns, and unpredictable climatic conditions. To navigate these challenges, ReSL has instituted a robust, three-tier Enterprise Risk Management (ERM) framework. This framework, approved by the Risk Management Committee, provides a structured and strategic methodology for identifying and mitigating risks, thereby supporting our long-term resilience and sustainability objectives.

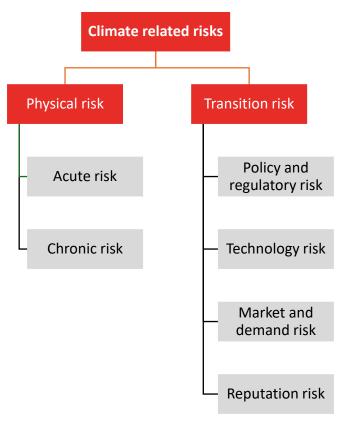
Our ERM framework is designed to detect and respond to climate-related risks and opportunities across all operational sites. Risk governance is founded on 3 pillars - Risk governance and oversight, risk infrastructure and management, and risk ownership. Our integrated approach to risk governance has enabled us to establish a strong governance mechanism to identify, assess and mitigate our most critical risks. This framework spans multiple risk domains, including environmental, financial, reputational, regulatory, technology, legal, and business continuity related risks, ensuring a holistic approach across our operations, value chain, and geographic footprint.

Environmental, Social, and Governance (ESG) considerations are deeply embedded in our business strategy. Our ESG Committee plays a central role in upholding our commitments to stakeholders and driving sustainable value creation. This committee is responsible for shaping our ESG strategy, engaging with stakeholders, and ensuring transparent, timely, and accurate reporting of our sustainability efforts to the Board and other stakeholders.

Further reinforcing our dedication to sustainability and innovation, we have appointed a dedicated Head of Sustainability and Innovation. This role underscores our commitment to embedding sustainable practices and fostering a culture of innovation throughout the organization.

#### Climate related risks

In line with the TCFD recommendations, ReSL has carried out a comprehensive risk assessment review to identify climate-related physical and transition risks. The categorization has been done as per below:



## Scenario analysis - Physical Risks

Physical risks arise from both sudden events and gradual shifts in climate patterns, potentially causing damage to assets or disrupting supply chains. Our evaluation includes a thorough review of historical trends and future projections related to various climate hazards, such as temperature variability, changes in precipitation, and water scarcity. This analysis helps us understand how evolving climate conditions could impact our ReSL India facilities.

Acute physical risks are those triggered by specific events, including the rising intensity of extreme weather phenomena like cyclones, floods, and droughts. In contrast, chronic physical risks involve long-term alterations in climate patterns, such as sustained increases in temperature, shifts in rainfall, and prolonged water stress. ReSL has systematically identified its locations across different regions that are vulnerable to both acute and chronic climate-related risks.

#### **Physical Risk Scenario Analysis**

The main goal of conducting scenario analysis in this report is to evaluate how our operations might be affected under various future climate conditions. This process helps us assess the resilience and adaptability of our business strategies. It involves exploring a range of hypothetical future scenarios, each based on specific assumptions and constraints.

ReSL leverages scenario analysis to guide its strategic planning and decision-making processes. We have identified physical risks associated with our sites and offices and conducted both baseline and forward-looking analyses using Representative Concentration Pathways (RCPs).

The analysis considered four RCP scenarios RCP 2.6, RCP 4.5, RCP 6.0, and RCP 8.5. We assessed current acute and chronic risks using tools such as Aqueduct and historical data from the India Meteorological Department (IMD), with 2019 as the baseline year. Projections for the years 2030, 2040, and 2050 were developed under each RCP scenario. These projections were informed by data from sources including Aqueduct (WRI Beta Version), the World Bank's Climate Change Knowledge Portal (CCKP), the Network for Greening the Financial System (NGFS), and the IMD.

#### Physical risks impact, mitigation, and adaptation plans

As part of our commitment to identifying and mitigating climate risks, we conduct scenario analyses (RCP 2.6, RCP 4.5, RCP 6.0, and RCP 8.5) with short, medium, and long-term time horizons of across all locations to assess a broad spectrum of physical weather phenomena. These include droughts, tropical cyclone, wind speed, heat wave, precipitation, riverine flood, coastline flood, water stress, sea level rise.

#### **Business Impact**

Various physical climate risks can significantly affect business operations and infrastructure. Droughts may result in stricter regulations on groundwater usage and drive up the costs of essential resources like water and electricity. Tropical cyclones can severely disrupt supply chains, halt operations due to power outages, and cause infrastructure damage that may even lead to data loss. High wind events pose threats to business continuity by affecting productivity and increasing the likelihood of wildfires, especially in arid regions. Heatwaves can lead to higher cooling and water procurement costs, while also impacting employee health and safety, thereby reducing productivity. Heavy rainfall can damage buildings and infrastructure and interfere with energy production from both renewable and non-renewable sources. Flooding from rivers and coastal areas can disrupt electricity supply, damage assets, and result in significant cleanup expenses. In regions facing water stress, businesses may encounter increased costs for water sourcing and face limitations on groundwater extraction. Lastly, rising sea levels pose long-term threats, including the potential for permanent closure of coastal facilities, increased operational expenses, habitat degradation, and elevated costs for recovery and maintenance.

#### **Mitigation Plan**

To reduce the severity and likelihood of physical climate risks, ReSL has implemented a range of mitigation strategies. For drought conditions, the organization is promoting the use of treated wastewater, installing rainwater harvesting systems, and recharging borewells to enhance groundwater levels. In cyclone-prone areas, non-engineered structures are being retrofitted to withstand extreme weather, and climate risk data is regularly updated to support informed planning. High wind events are addressed by reinforcing infrastructure and ensuring regular data backups to prevent loss. To mitigate the effects of heatwaves, ReSL is optimizing cooling systems and integrating green spaces to reduce heat absorption. For increased precipitation, the company is enhancing rainwater harvesting infrastructure and elevating electrical panels to prevent water damage. Flood resilience is being improved through infrastructure upgrades and comprehensive insurance coverage. In response to water stress, water efficiency measures are being implemented, and wastewater is being treated for reuse. To counter the long-term threat of sealevel rise, boundary walls are being strengthened, and flood protection infrastructure is being developed.

#### **Adaptation Plan**

ReSL's adaptation strategy focuses on enhancing resilience and ensuring business continuity in the face of evolving climate risks for all existing operations and new operations and will try to implement relevant adaptation measure within medium term (5-10 years). For drought, real-time water monitoring systems are being deployed, and alternative water sources are being explored. Cyclone preparedness includes the development of robust business continuity and disaster recovery plans, along with trained emergency response teams. High wind events are managed through disaster recovery protocols and operational safeguards. In response to heatwaves, the organization has established standard operating procedures for preparedness and conducts awareness campaigns to protect employee health. To adapt to heavy rainfall, early warning systems and temporary flood barriers are being installed to safeguard critical infrastructure. Flood response includes the formation of rescue teams, continuity planning, and securing essential insurance. In water-stressed regions, smart monitoring tools are used to track consumption and ensure efficient usage. For sea-level rise, evacuation zones are designated, emergency supplies are maintained, and long-term strategies are in place to protect vulnerable facilities.

#### Scenario analysis - Transition Risks

Transition risks are classified into four categories: policy & regulatory risk, technology risk, market & demand risk, and reputation risk. ReSL sees the following transitional risk with respect to climate change:

#### Transition risks – Business impact, mitigation actions, and Opportunities

#### **Policy & Regulatory Risk**

#### **Business impact:**

The introduction of new or more stringent environmental laws, carbon taxes, emissions trading systems, and product-specific carbon requirements can expose businesses to significant financial and operational risks. These regulatory shifts may lead to increased compliance costs, operational delays, or the need for substantial investment in cleaner technologies. Additionally, changes in permitting processes could impact project timelines and approvals. The unpredictability of carbon markets and evolving standards further adds to financial uncertainty. Failure to comply with these regulations or to adapt swiftly may result in penalties, reputational damage, and diminished investor trust, ultimately affecting long-term business sustainability and competitiveness.

#### Mitigation action:

To address the growing challenges posed by environmental regulations and climate-related risks, ReSL implementing robust mitigation strategies. These include investing in advanced waste processing technologies such as waste-to-energy systems, biomethanization, composting units, landfill gad capture, and material recovery facilities to reduce landfill dependency and greenhouse gas emissions. Companies are also adopting digital tools for real-time monitoring of emissions, waste segregation, and resource usage to ensure compliance with evolving environmental standards. Strengthening internal compliance frameworks, training staff on regulatory updates, and engaging with policymakers are additional steps taken to mitigate legal and financial risks.

#### **Opportunity:**

At the same time, these challenges present significant opportunities. The global shift toward sustainability has opened new markets for circular economy solutions, including recycling, upcycling, and sustainable packaging. Voluntary participation in carbon markets, such as the Indian Carbon Market (ICM), not only will prepare businesses for future regulations but will also provide a competitive edge through offsetting residual emissions. Companies that proactively align with ESG frameworks and carbon reduction goals can attract green investments, enhance brand reputation, and secure long-term contracts with environmentally conscious clients. Adhering to stringent emission regulations in major trading partner countries can enhance market access, while programs such as green credit, combined with robust EPR compliance, have the potential to increase business growth. Lastly, the growing demand for greener alternatives like RDF, AFR provides an opportunity to increase reliance on the company's services, while regulatory compliance enhances the overall reputation and opens potential growth opportunities in an evolving regulatory environment.

#### **Technology Risk**

#### **Business impact:**

These may include increased capital investments, project delays, budget overruns, and the risk that new technologies may become obsolete due to rapid advancements. Additionally, the development of innovative recycling methods often involves high research and development costs and may initially result in elevated emissions. On the digital front, transitioning to smart waste management systems and digital platforms brings its own set of challenges, such as maintaining customer satisfaction, ensuring consistent revenue streams, managing platform development and upkeep, and addressing cybersecurity vulnerabilities. These factors must be carefully managed to ensure a smooth and secure transition toward more sustainable and efficient operations.

#### **Mitigation action:**

To mitigate the financial and operational risks associated with adopting low-carbon technologies, can implement phased investment strategies, starting with pilot projects to assess feasibility and scalability before full deployment. Establishing partnerships with technology providers and research institutions can help reduce R&D costs and ensure access to the latest innovations, minimizing the risk of technological obsolescence. To manage cost overruns and delays, robust project management frameworks and contingency planning should be in place. For digital transformation, companies can prioritize user-centric design and continuous feedback loops to maintain customer satisfaction and platform usability. Investing in cybersecurity infrastructure and regular system audits is essential to safeguard digital assets and ensure data privacy. Additionally, training programs for employees on new technologies and digital tools can enhance adoption, reduce resistance to change, and improve operational efficiency.

#### **Opportunity:**

Adopting low-carbon technologies offers significant opportunities for business. These innovations can help differentiate businesses in a competitive market by showcasing environmental leadership and commitment to sustainability. They contribute to lowering greenhouse gas emissions, enhancing material recovery processes, and promoting efficient resource utilization, all of which align with growing market demand for eco-friendly practices. Such technologies also support the reduction of landfill dependency and help cut down Scope 1

emissions. On the digital front, embracing digitization can streamline operations, reduce turnaround times, and lower operational costs. Enhanced digital platforms improve customer experience and trust, while secure, direct payment systems cater to tech-savvy clients, boosting convenience and competitiveness. Together, these advancements not only support environmental goals but also create long-term economic value and operational resilience.

#### **Market & Demand Risk**

#### **Business impact:**

The growing emphasis on sustainability and transparency from global investors and financial institutions is placing increased pressure on businesses, potentially leading to higher resource and capital expenditures. At the same time, climate-related disruptions and reliance on carbon-intensive suppliers can strain logistics, elevate operational costs, and contribute to higher Scope 3 emissions—factors that may negatively impact a company's reputation and investor confidence. Additionally, rising energy prices, coupled with the adverse effects of climate change on workforce health and productivity, can further drive-up operational expenses and intensify challenges in attracting and retaining skilled labour.

#### Mitigation action:

These risks can be effectively managed through the implementation of targeted sustainability strategies, diversification of operations, and periodic reassessment of project portfolios to align with evolving environmental expectations. Collaborating with international institutions can also facilitate smoother integration of emerging sustainability frameworks. Strengthening partnerships with vendors and enforcing green procurement policies can enhance environmental performance and help reduce the overall ecological footprint. Transitioning to renewable energy sources, improving energy efficiency, and investing in waste-to-energy technologies can help offset rising financial pressures. Additionally, embracing automation can reduce reliance on manual labour, address workforce shortages, and improve service delivery, while also enabling the upskilling of employees to enhance productivity and well-being.

#### **Opportunity:**

These challenges also present valuable opportunities for growth and innovation. By adopting sustainable practices, companies can access green financing options such as green bonds and sustainability-linked loans, while also minimizing exposure to future carbon pricing mechanisms. Strengthening supply chain transparency and resilience not only enhances investor trust but also provides a strategic edge in competitive markets. The upward trend in energy costs can act as a catalyst for increased investment in affordable, eco-friendly energy alternatives. Moreover, fostering a diverse and inclusive workforce can lead to improved productivity and innovation, while the integration of automation technologies can help address labour shortages and enhance operational efficiency in the waste management sector.

#### **Reputation Risk**

#### **Business impact:**

brand reputation is increasingly tied to its commitment to sustainability. Falling short of established sustainability goals can significantly harm a company's public image and invite criticism from stakeholders, including investors, customers, and regulators. Neglecting environmental and social responsibilities may also hinder the ability to attract and retain top talent, as more professionals seek to align with purpose-driven organizations. Moreover, non-

compliance with recognized sustainability standards can lead to reputational setbacks, reduced competitiveness, and a decline in brand equity, ultimately impacting long-term business success.

#### Mitigation action:

To mitigate risks related to brand value erosion from unmet sustainability commitments, companies should establish clear, measurable, and achievable sustainability goals. Regular monitoring and transparent reporting of progress can build stakeholder trust and demonstrate accountability. Engaging stakeholders including investors, customers, and employees through consistent communication and sustainability updates helps reinforce credibility. Integrating sustainability into core business strategy and decision-making ensures long-term alignment and reduces the risk of reputational damage. Proactive compliance with evolving regulations and third-party audits can further safeguard brand reputation and maintain competitive positioning in the market.

#### Opportunity:

Effectively managing reputation-related risks allows companies to demonstrate resilience, build trust, shape positive stakeholder perceptions, and strengthen their long-term competitiveness and success.



#### **Scenario mapping - Transition risks**

Risk mapping for transition risks is carried out under two key climate scenarios: the Announced Pledges Scenario (APS) and the Divergent Net Zero (DNZ) scenario. The APS assumes that all climate-related commitments made by governments and industries globally up to March 2025 such as Nationally Determined Contributions (NDCs), net-zero targets, and goals for universal access to electricity and clean cooking, will be fully achieved on schedule. In contrast, the DNZ scenario envisions reaching net-zero emissions by around 2050, but at a higher cost due to inconsistent and fragmented policy implementation across sectors, resulting in a more abrupt and costly transition.

#### **Likelihood Criteria**

Rating	Description
Very high	High likelihood of risk event occurring
High	Risk events are likely to occur
Medium	Some likelihood of risk event occurring
Low	Risk of event could occur
Very low	Risk events are extremely unlikely to occur

#### **Impact Criteria**

Rating	Description
Catastrophic	Loss of ability to sustain ongoing operations
Major	Significant impact on the ability to achieve corporate strategies and business objectives
Moderate	Moderate impact on the ability to achieve corporate strategies and business objectives
Minor	Disruption to operations with a limited impact on the ability to achieve corporate strategies and business objectives
Insignificant	No material impact on the ability to achieve corporate strategies and business objectives

Carbon pricing mechanisms are expected to carry a high to very high likelihood under both scenarios, with the potential for severe financial consequences. Similarly, new regulations and standards are projected to rise from high likelihood and moderate impact in 2030 to very high likelihood and major impact by 2050 across both scenarios. The risk of litigation under DNZ is anticipated to grow from high likelihood and moderate impact in 2030 to very high likelihood and major impact by 2050, while under APS, it increases from moderate likelihood and minor impact to high likelihood and moderate impact.

Emerging recycling technologies present a high likelihood but minor impact by 2030, escalating to very high likelihood and moderate impact by 2050 under DNZ. These risks remain consistent under APS, though the impact stays minor. Digitization risks follow a similar trajectory in both

scenarios, increasing from moderate to high likelihood, with impacts ranging from minor to moderate by 2050.

Under the Divergent Net Zero (DNZ) scenario, the risk of shifting investor and financial institution expectations is projected to grow significantly from a moderate likelihood with minor impact by 2030 to a very high likelihood with major consequences by 2050. In contrast, under the Announced Pledges Scenario (APS), this risk starts with low likelihood and minimal impact, gradually increasing to moderate likelihood and impact by 2050. Market risks related to sustainable supply chains also intensify under DNZ, rising from moderate likelihood and impact in 2030 to high likelihood and major impact by 2050. Under APS, these risks remain lower, starting with low likelihood and minor impact, and reaching moderate levels by mid-century.

The cost of energy and labour under DNZ is expected to escalate from moderate risk in 2030 to high likelihood and major impact by 2050, while under APS, it progresses more gradually from low to moderate risk over the same period. The adoption of low-carbon technologies under DNZ shows a moderate likelihood and impact by 2030, increasing to high likelihood and major impact by 2050. Under APS, this risk remains low until 2030, then rises to moderate levels by 2050.

Lastly, reputational risks tied to brand value are expected to be more pronounced under DNZ, with high to very high likelihood and impacts growing from moderate in 2030 to major by 2050. Under APS, these risks are somewhat lower, ranging from moderate to high likelihood, with impacts increasing from minor to moderate over the same period.



# 7. Financial impact analysis

#### **Financial Risks**

According to the Indian Meteorological Department (IMD), a heatwave is defined as a situation where the maximum temperature at a station reaches at least 40°C in plains or 30°C in hilly regions. These heatwaves are becoming more frequent and intense due to climate change, posing serious risks to human health and the environment. To reduce these impacts, several mitigation strategies are being implemented, including expanding green spaces, optimizing cooling systems, establishing heatwave preparedness protocols, and conducting public awareness campaigns. Under the Current Policies scenario developed by the Network for Greening the Financial System (NGFS), it is projected that India could face a financial loss of approximately ₹22 crore by 2030 due to reduced labour productivity caused by heat stress. In comparison, the estimated cost of implementing mitigation measures such as cooling infrastructure, protective gear etc., is around ₹3 crore.

ReSL has identified GHG emissions are subject to potential carbon pricing regulations in future. If carbon pricing programs grow, there is the potential for increased operational costs. Our intent is to make meaningful investments to reduce GHG emissions. The levers ReSL is using to actively mitigate this risk are usage of renewable energy, resource recovery (RDF, AFR, etc.,), transition our fleet to run on alternative fuels, biomethanization, and landfill gas capture

#### **Financial Opportunity**

The growing demand for recovered resources, recycled materials, and upcycled products is creating new opportunities for ReSL to expand its operations. This trend supports the establishment of new facilities or the scaling up of existing ones. With the rise in green and sustainable buildings, there has been a steady increase in the demand for recycled construction products such as paver blocks and kerb stones made from Construction and Demolition (C&D) waste. Additionally, recovered sand and aggregates from C&D waste are increasingly being used in construction, particularly for non-load-bearing applications. Furthermore, with stricter regulations mandating the use of Alternative Fuels and Raw Materials (AFR) and Refuse-Derived Fuel (RDF) in industries like cement manufacturing, there is a growing demand for ReSL to scale up its production of AFR and RDF. This regulatory push is paving the way for the development of additional facilities to meet the rising demand. In FY 2024–25, a capital expenditure of ₹696 crore was strategically invested in infrastructure development to advance sustainable business activities.

# 8. Metrics and Targets

We manage climate-related risks through targeted emissions reduction and resource recovery, supporting the shift to a low-carbon economy. Our services help customers quantify and reduce their carbon footprint, while we focus on lowering our own Scope 1 and Scope 2 emissions. Key metrics include recovery of alternative fuels and raw materials (AFR), supply of refuse-derived fuel (RDF) to cement industries, and the share of electric and CNG vehicles in our fleet. We also track diesel avoidance, greenhouse gas emissions across Scope 1, 2, and 3, and safety indicators such as fatalities and recordable injuries. Financial performance is assessed through revenue by business division and region, along with operating expenses.

- 45% reduction in GHG intensity by FY 2040 from baseline FY 2023
- Increased to 75% of EV or CNG Vehicles by FY2028
- 60% reduction of diesel consumption in fleet by FY 2028 from baseline FY2023
- Establish a plant for 'chemical recycling of plastics' by FY 2028

