

SUSTAINABILITY FAQ_s



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www.indoramaventures.com

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1. General

1.1 What does sustainability mean to IVL?

Sustainability at Indorama Ventures means achieving business growth with positive environmental and societal impacts; and effective management of the Triple Bottom Line – People, Planet and Prosperity. This includes embracing environmental, social and governance (ESG) obligations and opportunities. Indorama Ventures (IVL) is deeply committed to sustainability. It serves as the foundation of our business strategy and aims to achieve business growth with positive environmental and societal impacts that support our vision of becoming a world-class chemical company making great products for society. Our emphasis is on sustainable operations with an environmental and social focus, together with innovation management, product stewardship and occupational health and safety.

For more information, please refer to our website under [Sustainability Overview](#).

1.2 What is our sustainability objective?

Our objective is to ensure our economic success and the sustainability of all our stakeholders. We measure our success through our economic gains as well as our achievements in preserving and supporting the environment, thereby receiving a social license to operate.

For more information, please refer to our website under [Sustainability Overview](#).

1.3 How important is sustainability at IVL? Is it part of our corporate values?

Sustainability is the foundation of our overall business strategy. Our sustainability initiatives fully support our vision of becoming a world-class chemical company making great products for society. An increased emphasis on sustainable operations in environmental and social dimensions, together with innovation management, product stewardship, occupational health and safety helps us in achieving our vision.

For more information, please refer to our website under [Business Integration with SDGs and Sustainability Reports](#).

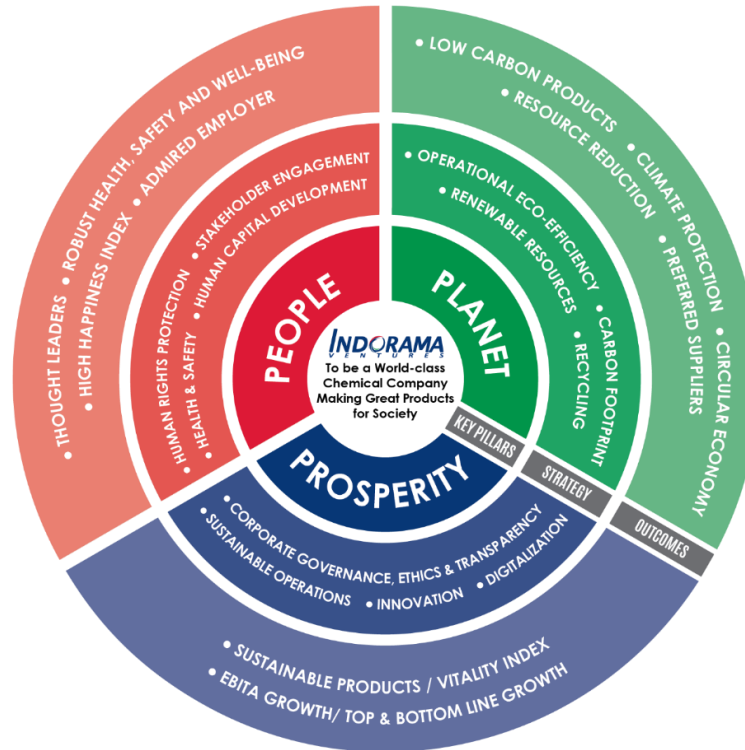
1.4 What is IVL's Sustainability Strategy?

Sustainability means consistently developing and delivering on our Sustainability Strategy and demonstrating that moving towards a sustainable economy creates a number of tremendous opportunities.

Our strategy supports our vision of becoming **a world-class chemical company making great products for society** and is an important component of our business strategy and direction. It is demonstrated through our commitment to our three sustainability pillars: **Planet, People and Prosperity**.

IVL undertook several initiatives that are aligned with our commitment to increase our focus on the long-term sustainability of the Company through recycling, lowering our carbon footprint, increasing use of renewable energy and developing human capital.

Strategic Areas and Outcomes



For more information, please refer to the strategic areas and expected outcomes in our [Sustainability Strategy](#).

1.5 How do our sustainability efforts improve the value of our business?

Sustainability encourages innovation and ground-breaking ideas. We initiated several new practices in the last couple of years, including, but not limited to, measuring customer satisfaction, employee engagement, human rights protection and assessments, GHG accounting, scenario analysis, stress testing, TCFD analysis, water assessments using WRI's Aqueduct tool and shadow pricing. Sustainability is something we embrace, and has positively impacted our:

- Potential for Business Development and Investment
- Competitiveness
- Risks vs. Opportunities
- Efficiency and Productivity
- Stakeholders' Expectations
- Brand Value and Preference Among Consumers
- Ability to Raise Capital
- Leadership Development
- Protection of Human Rights in our Workplace and Supply Chain

1.6 How are we helping to achieve the UN SDGs?

At the United Nations Sustainable Development Summit in September 2015, world leaders adopted the 2030 Agenda for Sustainable Development, which included a set of 17 action-oriented Sustainable Development Goals (SDGs), accepted by all countries. Achieving the SDGs by 2030 is highly ambitious. Countries are now mobilizing to take concrete action over the next decade to protect the world. The 17 SDGs and 169 targets seek to eradicate poverty, strengthen human rights and promote gender equality and the empowerment of women and girls. The private sector has an important role to engage with governments, institutions and communities in delivering these goals.

Considering the nature of our business, IVL is committed to the following SDGs. The colored goals below are directly impacted by business activities which IVL strongly supports. The other goals are indirectly impacted by business activities which IVL continues to monitor.



For more information, please refer to [Business Integration with the SDGs](#).

1.7 Do we report on sustainability issues?

We report on relevant sustainability topics through our website under the [sustainability section](#), [press releases](#), [social media](#), [annual conferences](#), [sustainability report – executive summary](#), and [sustainability report](#). The executive summary and our sustainability report are published annually.

Apart from the above, we communicate with our stakeholders including employees, shareholders, customers, suppliers, investors, banks, government, media, and communities about sustainability through a variety of engagement mechanisms such as our:

- Annual General Meetings
- Opportunity Days
- Analyst Meetings
- Shareholder and Community Visits to Plants
- Shareholder Surveys
- Investor Fact Sheets
- Customer Satisfaction Surveys
- Materiality Assessment Surveys
- Customer Visits
- Employee Engagement Surveys
- Marketing Materials
- New Employee Orientation and Training
- Town Hall Meetings
- Tradeshows, Conferences, Seminars
- Memberships with Industry Associations and Bodies
- Community Visit Programs
- Open House Programs with Communities and Local Authorities

For more information, please refer to our website under [Sustainability Overview](#) and our [Sustainability Reports](#).

1.8 What is a sustainability reporting framework?

Our sustainability report is produced based on the Global Reporting Initiative (GRI) Standards as a format to provide information under three pillars: economic, environmental, and social. Apart from being an important source of information, the sustainability report is a tool us to strengthen the link between non-financial and financial performance, allowing for further growth in sustainable development.

For more information, please visit the [Global Reporting Initiative](#).

1.9 Why are we following the Global Reporting Initiative (GRI) Standards?

The Global Reporting Initiative, known as GRI, provides an international standard to measurably and efficiently structure sustainability reports. The guidelines help us to communicate with our stakeholders on the current impacts on issues related to our sustainability, such as climate change, human rights, and corruption. In particular, it allows us to demonstrate the transparency of our organization to external stakeholders.

For more information, please visit the [GRI Standards](#).

1.10 What are the benefits of sustainability reporting?

Stakeholders may now understand our company’s strategic direction and effectively monitor our ESG performance. They can use this publicly reported information to make an informed decision in order to invest and conduct business with us.

Furthermore, our sustainability reporting helps by providing non-financial information and company highlights, showcasing our ESG strengths, initiatives, performance, and external recognitions in comparison to our Annual Report which provides financial information.

1.11 What are our sustainability achievements?

Our accomplishments and recognitions speak to the focused efforts of management, together with the outstanding commitment and efforts of our employees. It is important that we build on these successes and continue our work in being “a world-class chemical company making great products for society.”

Our achievements include our listing on the Dow Jones Sustainability Indices, Bloomberg’s ESG Disclosure Score, Transparency International’s Transparency in Corporate Reporting, MSCI, CDP Scores, RobecoSAM’s Sustainability Award Yearbook 2019, FTSE4Good Index, EcoVadis Business Sustainability Ratings, and Sustainalytics’ ESG Ratings.

For more information, please refer to our [External Ratings](#) and [Sustainability Reports](#).

1.12 What is Materiality Assessment and what are Key Material Aspects?

The focus areas and the strategic measures we adopt in terms of sustainability are based on a Materiality Assessment. In accordance with the GRI Standards, we are constantly evaluating material issues that have an impact on the sustainable development of the company from both internal and external stakeholder perspectives. Materiality Assessment helps identifying and prioritize most important sustainability issues to the business and stakeholders.

In 2019, the materiality assessment process was extended to more external stakeholders, such as customers, suppliers, bankers, investors and the media. The feedback helped in defining the key material issues and focus areas for our sustainability management and reporting. A *Materiality Matrix* of our company is available in our Sustainability Report. As a result of the assessment, our stakeholders and IVL consider the following key material aspects to be the top economic, environmental and social issues:

12 Key Material Topics in 2019



For more information, please refer to our [Sustainability Reports](#).

1.13 What is an External Assurance Audit?

External Assurance is an essential step in increasing confidence in the quality of sustainability content, data and processes portrayed in the sustainability report, as it provides an independent, third-party assessment of the thoroughness and relevance of sustainability principles, systems, methodology and the overall approach. Generally, external assurance or verification involves a systematic, independent and documented process for the evaluation of reported sustainability information against pre-defined criteria or benchmarks and, in some cases, according to an assurance or verification standard(s) such as AA1000AS (2008) and/or ISAE3000, GRI Standards. All assurance or verification activities are designed to provide the company’s management and readers of sustainability reports with information about the quality and credibility of the report. Assurance Standard AA1000 states: “Credibility can be considerably enhanced through independent external assurance using accepted professional standards. Reporting organizations and their stakeholders increasingly accept that robust independent external assurance is a key way of increasing the credibility and effectiveness of their reporting and ultimately their performance.”

External assurance can greatly enhance the credibility of sustainability disclosures. Investors, rating agencies and other analysts increasingly look for assurance when making investment and rating decisions based on sustainability performance. For instance, issues such as carbon risk and the ability to trade emissions may have direct financial implications.

The assurance, or verification process, is usually undertaken by an independent third party and is therefore referred to as “external” assurance or verification. Some companies use internal staff to check the quality of information in their sustainability reports as part of an internal assurance/verification process, but this answer focuses on external assurance.

TUV India Private Limited, an external independent auditor, has verified data for 100% of our sites covering all business segments and locations. The details of the assurance verification are given in our Sustainability Reports. We also engaged TUV Nord CERT GmbH, an external third-party auditor, for verification of the GHG Scope 1 and 2 data.

2. Economic

2.1 What are our corporate sustainability policies?

IVL is a responsible and ethical organization. We cooperate with all relevant authorities to ensure compliance with applicable laws and regulations, and apply fair employment practices that meet international standards with respect to human rights and common labor practices.

We treat all of our stakeholders with respect, and maintain an open dialogue with authorities and NGOs to promote and maintain constructive relationships and a positive image of our business.

As a leading industrial corporation, we strive to limit our impact on the environment and on the adjacent communities where we operate by actively seeking ways to reduce industrial waste through reuse, recycling, and by promoting energy conservation.

The following corporate sustainability policies are available on our website under Corporate Governance: [Policies](#), [Charters and Qualifications of Directors](#), [Supplier Code of Conduct](#), [Financial Accountability](#), and [Group CSR Policy](#).

2.2 Are we sourcing from sustainable resources for base materials?

IVL believes renewable energy and raw materials are the way of the future. We purchase renewable energy, particularly wind and solar power, and now have three subsidiaries using 100 percent renewable electricity. In addition, we procure sustainable raw materials including bio-based and recycled resources.

We are environmentally responsible when it comes to managing our operations, and continue to identify ways to improve our processes and products to reduce their risks and impacts throughout the product life cycle. We are also looking at ways to further improve the safety of our facilities.

For more information, please refer to our website under [Responsible Sourcing](#).

2.3 Are we conducting research and development (R&D) for more sustainable sources?

Our research and development activities focus on innovation and sustainability. Environmentally-friendly product development programs build on our ideas to make next-generation products with reduced environmental impacts. One example is tea bags made from biodegradable polylactic acid (PLA) fibers developed for hot liquid filtration, which replaces polyolefin fibers. We also produce Bio-PET from Bio-MEG, made from sugarcane as the raw material for many of our customers.

For more information, please refer to our website under [Our Innovation](#) and [Sustainability Reports](#).

2.4 Where do we stand relative to our competitors?

IVL was recognized in RobecoSAM's Sustainability Yearbook and listed in the Dow Jones Sustainability Indices (DJSI) under the Chemical Industry. We are also listed on the DJSI World Index, ranked second among global chemical companies and one of only two companies in the DJSI Emerging Markets Index.

3. Environmental

3.1 How are we ensuring supply chain evaluations?

We have adopted a Supplier Code of Conduct and a Supplier Evaluation Process. IVL and our subsidiaries/affiliates conduct business in accordance with all applicable laws, regulations and the highest ethical standards, together with a strategic approach to corporate responsibility. In order to ensure alignment across the supply chain, we expect our suppliers to adopt similar principles. Therefore, we actively engage with our supply chain, encouraging adherence to our supplier code of conduct.

The supplier evaluation process, initiated in 2014 and extended to all raw material suppliers and critical non-raw material suppliers in 2015. We recognize the importance of efficient supply chain risk management relating to ESG factors. To minimize risks, we have been focusing on positively influencing and collaborating with supply chain partners to promote best practices in the areas of human rights, health and safety, and compliance with environmental, labor and other applicable regulations. This process applies to all new raw material and critical non-raw material suppliers. The process involves a systematic and harmonized approach, requesting that suppliers respond to a self-assessment questionnaire that assists in assessing opportunities and risks relating to human rights, child and forced labor, governance (regulatory compliance) and improving a sustainable supply chain. Since 2017, all new suppliers were assessed using ESG criteria and no supplier was identified as having negative environmental or social impacts.

Although there is no standard, practice or mechanism, we encourage suppliers to follow ESG requirements. In the supplier evaluation process, we have adopted ISO 14064 and ISO 45001 systems and encourage suppliers to lower their carbon products and energy usage.

For more information, please refer to our website under [Supplier Code of Conduct](#) and our [Sustainability Reports](#).

3.2 Are we using non-toxic practices to minimize damage to the environment during our production process?

Although our end-products are not harmful, we are always seeking ways to lower potential environmental impacts and the toxicity of raw materials and other chemicals used in our processes. We stringently monitor our raw materials. Any potential issue that is discovered is actively replaced with known, registered materials or with alternatives that are safe, based on their chemistry. We actively engage in assessments and ensure that we meet the European Union's REACH regulations and other compliance requirements. We continually evaluate chemicals used in our operations and their exposure to our employees and the environment, to have effective control of volatile substances on the ECHA SVHC list and SIN list that may present a risk.

For more information, please visit our website under [Product Stewardship](#).

3.3 Do we measure our environmental performance?

We actively measure our environmental performance, including GHG emissions, energy consumption, renewable energy consumption, water consumption, and waste consumption. We realize that an environmental management system is an important tool to manage the impacts of our activities on the environment by providing a structured approach to planning and implementing environmental protection measures against our targets.

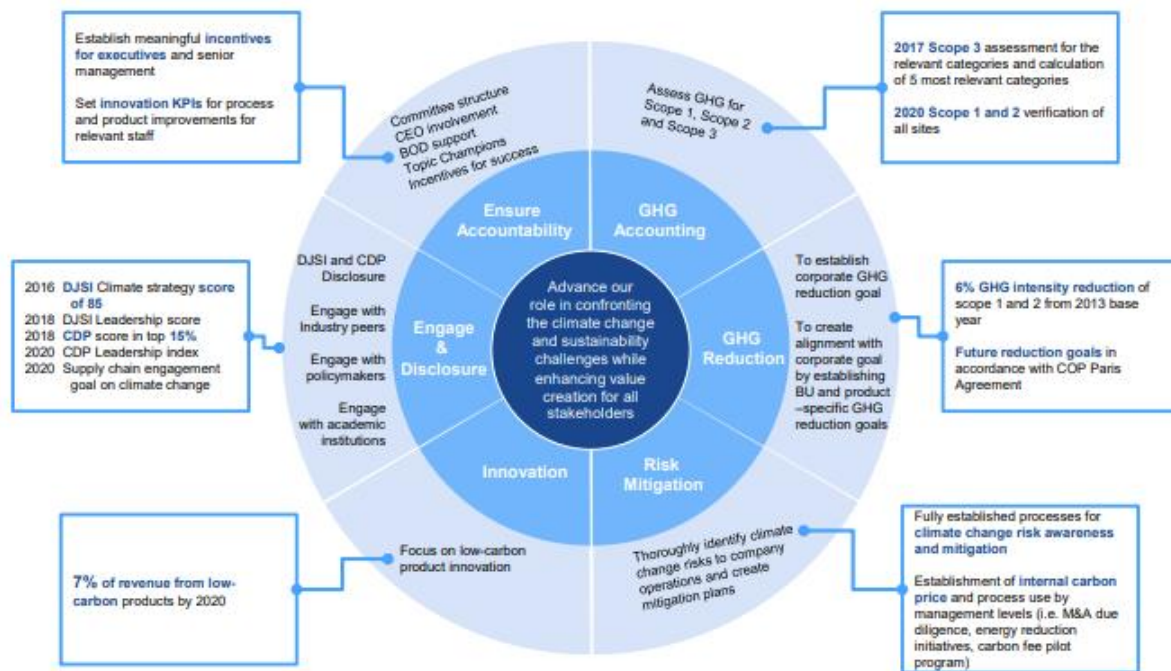
For more information, please visit our website under [Environmental Stewardship](#) and our [Sustainability Reports](#).

3.4 What is our climate strategy?

We recognize that climate change is one of the most serious risks that the world is facing today. Any impact on the environment may affect our businesses, our economies and our livelihoods. Below is our climate strategy addressing key climate risks to the company.

Indorama Ventures Climate Strategy 2020

Announced in 2016



We developed a Climate Strategy Corporate Standard that guides our global operations in terms of best practices for the climate, including GHG management, with key actions and KPIs for six segments.

For more information, please visit our website under [Climate Change Strategy](#) and our [Sustainability Reports](#).

3.5 Do we have environmentally friendly/energy saving production processes to minimize our carbon footprint?

We are focused on reducing our carbon footprint by improving our operational eco-efficiency, resource conservation, shifting to low-carbon fuels, renewable energy and identifying opportunities for improvements through various assessments such as energy audits and life cycle assessments.

By improving our operational eco-efficiency, we are committed to protecting the environment through reductions in greenhouse gas emissions (GHGs), air emissions and ensuring certification of all our operating sites to ISO 14001 and ISO 50001 standards. This helps to ensure standardization across all of our sites with respect to environmental and energy management.

For more information, please visit our website under [Environmental Stewardship](#) and our [Sustainability Reports](#).

3.6 Do we track and publicly report GHG emissions?

Yes, we track and report GHG emissions. We capture GHG emissions at the plant level, business segments, and corporate level. We benchmark our performance within our entities and for the company.

We follow GHG protocols and our GHG information is verified by external audits. Our external verification is included in our [Sustainability Reports](#). We report GHG emissions in our [Sustainability Report](#) and the [Sustainability Report – Executive summary](#) which is published annually.

For more information, please refer to our [Sustainability Reports](#).

3.7 Do we have GHG reduction targets? Have they been publicly communicated?

Yes, we set a target of combined Scope 1 and Scope 2 GHG intensity reduction target of 6% from 2013 to 2020. We also benchmark our performance internally within our entities and externally with peer groups.

We report our GHG reduction targets through the Sustainability Report and Sustainability Report – Executive summary which is published annually.

For more information, please refer to our [Sustainability Reports](#).

3.8 Do we have water reduction targets? Have they been publicly communicated?

Yes, our water reduction target aims to reduce or maintain our water intensity from the previous year. We also benchmark our performance internally within our entities and externally with peer groups.

They are published in our Sustainability Report and Sustainability Report – Executive summary.

For more information, please refer to our [Sustainability Reports](#).

3.9 Do we have a chemical use minimization plan?

Our goal is to complete a comprehensive assessment of our raw materials, chemicals, and products by the end of 2020 regarding the SIN list and to set a target for improvements by the end of 2021. We monitor the release of SVHC updates and assess our raw material streams. In some cases, a substance could be on an SVHC list in raw form, but once it is converted to a different, benign form, it no longer has a product safety risk.

For more information, please refer to Substances of Very High Concern section under [Product Stewardship](#) on our website.

4. Social

4.1 Are sustainability programs incorporated in our work processes?

We have a variety of sustainability programs in place, including GHG accounting, product life cycle assessments, human rights assessments, employee engagement and customer satisfaction surveys.

For more information, please refer to our website under [Sustainability](#) and our [Sustainability Reports](#).

4.2 Do we have a corporate social responsibility (CSR) strategy?

Our group-wide corporate social responsibility (CSR) strategy aims to achieve long-term sustainable growth through economic development and innovation by focusing on the benefits we provide to the people and communities where we operate. In order to fulfill our philanthropic aims, we support and develop local communities by creating value for all of our stakeholders. The three main priorities of our CSR strategy, education, health, and the environment, are focused on creating value for both the company and society and are aligned with the United Nations Sustainable Development Goals (SDGs).

For more information, please refer to our website under [CSR](#).

4.3 Do we have a recycling program in our workplace?

Since we own many recycling facilities and the sector is experiencing rapid growth, we encourage our employees to recycle and learn more about recycling. We have a learning center at our headquarters for our employees detailing information about our raw materials, processes, and products. Our goal is to create a new mindset in which our products become raw materials through recycling. We also have recycling bins to collect PET bottles and provide some of our employees with t-shirts made from recycled bottles which are worn every Friday in support of our “We Source-We Make-We Recycle” approach.

For more information, please visit our website under [Recycling](#).

4.4 Do we have a recycling education program?

We have a recycling education program for children that promotes waste separation, recycling concepts, and increases awareness and encourages their involvement in protecting the environment.

As of December 2019, over 13,000 people, which includes teachers, students and community people were educated on waste separation and recycling PET. The teaching materials include colorful recycling guides, as well as many practical, hands-on activities for students to play with as they learn

first-hand how recycling works. We also provide these recycling materials online, allowing everyone to have access to our [recycling education packages](#) through our website. This program provides useful knowledge about various types of plastic, recycling basics, and the important benefits of recycling.

For more information, please visit our website under [Recycling education](#).

4.5 Do our other CSR/programs give back to society?

Our CSR activities are aligned with our group-wide corporate citizenship and philanthropic contributions, which are focused on three main priorities: education, health, and the environment. We have been conducting many CSR activities to give back to society. Our CSR and Sustainability teams provide recycling education packs to students, schools, the public and private sectors and other organizations. We provide funding for several programs including the “Run Fast, Stop Stroke” running event and building check dams to support water conservation.

For more information and a complete list of our CSR activities, please visit our website under [CSR](#) and under highlighted CSR activities in our [Sustainability Reports](#).

4.6 Are we in compliance with local labor laws with respect to human rights?

The United Nations Global Compact, a policy platform and a practical framework for companies that are committed to sustainability and responsible business practices, remains the guiding force for our Workplace Human Rights Assessment (WHRA) framework. Our WHRA framework includes four levels: corporate, country, site and product. It covers all stakeholders involved in our operations, including joint ventures, such as employees, children, indigenous people, migrant labor, third-party contracted labor and local communities, ensuring that we are in compliance with local labor laws.

For more information, please visit our website under [Human Rights](#) and in our [Sustainability Reports](#).

4.7 How do we ensure the health and safety of our workforce?

We conduct many health and safety programs at our sites around the world including compulsory and occasional health and safety training programs. We follow a systematic standard for our occupational health and safety protection according to ISO 45001/OSHA18001 occupational health and safety management system certifications. Since sources of errors and risks can be identified and eliminated or minimized, the number of occupational accidents can be significantly reduced and further prevent the likelihood of potential fatalities. We also make sure that both our contractors and employees undergo mandatory training.

For more information, please visit our website under [Occupational Health and Safety](#) and [ISO & Related Certification](#).

5. Others

5.1 What is PET?

PET or Polyethylene Terephthalate, a polymer from a polyester family is manufactured from terephthalic acid (a dicarboxylic acid) and ethylene glycol. With its excellent material properties, PET is commonly used in packaging industry or as synthetic fibers in industrial, clothing applications.

For more information, please [click here](#) to read more about PET.

5.2 Myths and Facts about PET

There are some misleading beliefs and perceptions about PET plastics. To correct misperception about PET, [click here](#).

To learn more, visit <https://www.indoramaventures.com/en/sustainability/at-a-glance>; or email sustainability@indorama.net