Natural capital

Greening up our footprint

KEY HIGHLIGHTS FOR FY 2020-21

57.2%
Renewable Energy (RE) consumption against total consumption

₹12.2 Crores
Expenditure on environmental initiatives

58.9%
Reduction in specific non-process water consumption

184.5%
Water replenishment

(as compared to FY 2013-14)

INTERLINKAGE WITH MATERIAL TOPICS AND OTHER CAPITALS

Material topics

- Water management
- Environmental compliance
- Social impacts of products

Interlinkages to other capital

- Financial capital
- Human capital
- Manufactured capital
- Intellectual Capital
- Social and relationship capital

OUR FOCUS AREAS

- **P**roduct stewardship
- **N**atural resource conservation
- **E**nergy and emissions
- **W**aste management
- **P**eople and community

PROJECT 'NEW'

KEY HIGHLIGHTS FOR FY 2020-21 (CONT.)

34.7%
Reduction in specific electricity consumption

56%
Reduction in specific hazardous waste disposal footprint

75.9%
Reduction in specific effluent generation

65.4%
Reduction in emissions

(as compared to FY 2013-14)

We, at Asian Paints, are driven by the purpose of creating value through our unique, durable and environment-friendly products and solutions.
As one of the leading paint companies, we recognise our role as a responsible corporate citizen towards environmental stewardship and constantly strive to manage our resources and minimise our environmental footprint. Natural capital being a relevant part of our value creation model, drives us towards meeting our business needs by creating sustainable products and solutions with minimum impact on the natural ecosystem. We primarily focus on areas of natural resource conservation, energy and emissions, waste management (Project 'NEW'), along with product stewardship and people and community.

In addition to our environment-driven efforts, we also undertake initiatives around product stewardship which help us reduce our environmental footprint at the formulation level whereas through Project NEW we focus on resource efficiency at the manufacturing level.

Going forward, we foresee changes in the regulatory landscape, disruptions in the global supply chain, availability of raw materials as the key risks and have adopted measures to mitigate these through our well-formulated risk management procedures.
Our robust management system and well-defined processes help us achieve compliance with all applicable environmental regulatory requirements.

During the reporting period, extending our efforts towards environmental initiatives, we spent ₹12.2 Crores[33].

Trend of some of the parameters highlighted under Natural Capital are strictly not comparable due to commissioning of two mega plants at Mysuru and Visakhapatnam in FY 2018-19. Further, in FY 2020-21, disruptions of plant operations due to COVID-19 have impacted few parameters.

[33] GRI 307-1 Non-compliance with environmental laws and regulations

PRODUCT STEWARDSHIP- PROMOTING RESOURCE EFFICIENCY AND EXTENDING OUR 'GREEN PROMISE'

We constantly set standards to remain a leader in product stewardship arena and invest in unprecedented innovation that offers unique value to consumers while enhancing product safety and sustainability.

The theme of product stewardship has evolved over the years and our continuous efforts have enabled us to make positive environmental impacts through our product innovation techniques. We have undertaken the following efforts:

- **Increase in renewable raw materials (materials sourced from renewable sources):** We have constantly made efforts to increase the renewable content of the products and process innovation. This is exemplified through our renewable content share in three large-volume products viz. Ace Exterior Emulsion, Tractor Emulsion Advanced, and Apcolite Enamel. The renewable content in these products has been increased from 20% to 60% from the earlier levels in FY 2019-20
- **Eliminating harmful ingredients:** We produce architectural paints which are lead and heavy metal free since the year 2008, and subsequently free from added Respirable Crystalline Silica (RCS) since 2013
- **Process innovations for energy and raw material efficiency:** A new way of dispersion technology enabled us to reduce rutile content which is a key contributor to Greenhouse Gas (GHG) emissions
- **Formulating products that are durable or have better wall coverage:** In the space of exterior paints, sustainability through durability has been the focus. This can be witnessed through the example of Ultima Protek Lamino, which has a longer service life and added features like graffiti removal. Another product called Apcolite Rust Shield addresses the challenge of corrosion in household metallic structures
- **Green assurance declaration:** For our business, customer health and care for environment are of great importance. Continuing our commitment to being truly 'green', we are assuring our customers of eco-friendly paints through our 'Green Assure'[34] declaration

The above steps are aided by Life Cycle Assessment (LCA) studies of products that enable us to identify hotspots and thus opportunities for improvement.

NATURAL RESOURCE CONSERVATION AND RESOURCE EFFICIENCY

Material management[35]

Resource efficiency forms an integral part of our environmental strategy. Through our continuous efforts, we strive to meet the needs of our customers. In doing so, we optimise our resource management approach to efficiently utilise the raw materials and minimise material waste. To ensure the availability of raw materials required for our business operations, we make optimum use of our resources and adopt ways to reuse and reintroduce excess material in our production process without compromising on the quality of our products and solutions.

To make our products more sustainable, we have minimised the use of toxic and hazardous chemicals as raw materials in our processes.

[34] 'Green Assure'– Framework established in 2012 for waterborne architectural paints. These products not only conform to international VOC specifications, but they also do not contain any hazardous raw materials like lead, heavy metals, APEO (Alkylphenol Ethoxylates) and toxic materials. An example is Royale Aspira–Interior paint with five years performance warranty and Green Assure compliance.

[35] GRI 301-1: Materials used by weight or volume

Water management[36,37]

Globally, water scarcity is perceived as a major climate related risk. It becomes important to source and utilise this scarce resource in a responsible manner. We understand that the intensity of water usage in our operations is limited however, the overall consumption is still significant in the local context. Appreciating that water is a shared resource with the community, we have been focused on water management in the following three categories.

- Our efforts of reducing the overall specific water consumption for non-process water has resulted in reduction by 58.9% since FY 2013-14
- We reuse or recycle wastewater back within the factories such that all our decorative manufacturing sites are zero liquid discharge facilities
- We implement watershed management and community outreach programmes thus recharging more water back into the earth than what we consume every year. In FY 2020-21, we recharged 184.5% of the total water that we use in our manufacturing sites

Over the years water management processes have evolved across all factories, and it reflects in the kind of improvements made in key metrics of specific non-process water consumption and water neutrality.

Water consumption[38]

To meet our water needs, we rely significantly on government supplied water sources for the purpose of our business operations.

We also collect water through rainwater harvesting for consumption within the factories.

Water consumption details

Particulars[39]	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Rainwater collected and consumed within factory (megalitres)	52	65	148	**154**
Specific water consumption (KL/KL)	0.79	0.68	0.82	**0.80**

Water conservation

During FY 2020-21, we undertook many initiatives towards water conservation and replenishment. A brief of these initiatives is provided as follows:

1. Integrated watershed development (offsite projects)
2. Water harvesting (on site projects)

Off-site projects

With the help of our off-site projects, we enhance rainwater harvesting capacities at various locations, thereby ensuring water security for our communities.

We implement integrated watershed development in villages nearby to our factories. We undertake initiatives like pond cleaning, desilting, irrigation channel lining, train farmers on micro irrigation systems, integrated pest and soil health management. Our projects begin with need assessment to form a baseline and end with impact analysis to measure the outcome.

- As part of our CSR initiative at Kasna, Uttar Pradesh, we created rainwater recharge potential by constructing ponds of 7,360 KL and 2,559 KL capacity at Mehpa Jagir, Uttar Pradesh and Pachayatan Uttar Pradesh, respectively. With this initiative, the current capacity of rainwater harvesting supports together more than 30 families living around the village
- At our Mysuru factory, we rejuvenated ponds at Sindhuvelli, Nerale village and Bilikerekatte-Basavatige both in Karnataka to increase the rainwater recharge potential in these villages. This has led us to harvest more than 85,000 KL of rainwater in FY 2020-21
- At Visakhapatnam, we undertook initiatives to enhance the surface water and groundwater resources of Panchadarla village, Andhra Pradesh through the local pond renovation and check dam construction. As a result, we created a rainwater recharge potential of 46,800 KL out of which more than 29,000 KL rainwater has been harvested during FY 2020-21

[36] GRI 303-1 Interactions with water as a shared resource

[37] GRI 303-2 Management of water discharge-related impacts

[38] GRI 303-5 Water consumption

[39] GRI 303-3 Water withdrawal

On-site projects

Our on-site projects are focused on reducing freshwater consumption and increasing the share of recycled water in our processes. Our efforts have led us to undertake initiatives at various factories. In Mysuru factory, storm and roof water reservoirs collectively contribute to a sump of capacity over 54,700 KL. Similarly, at our Visakhapatnam factory, we have storm and roof water reservoirs that collectively contributes over 52,000 KL. The collected rainwater in our factories are treated in the plant itself and used for various process (related to paint production) and non-process activities. Owing to our initiatives, during FY 2020-21, we have been successful in consuming ~17,972 KL of total roof and storm water at factory located in Mysuru. Similarly, at our Visakhapatnam factory, more than 66% (or 74,166 KL) of the total water consumption consists of rainwater during the reporting period.

Biodiversity management[40,41]

Although we operate from sites which are located in industrial areas, we are well aware of the various impacts our operations have on the local biodiversity, even though limited in nature. In order to address this concern, we link our sustainability management strategy with key aspects of biodiversity that would help us mitigate the risks related to the ecosystem and also reduce our dependencies. We, as a first step, meet all our regulatory requirement of green belt development and maintain 33% of greenbelt in our plants and facilities. Further to promote local biodiversity, we undertake plantation of local species of plants within our factories, avoid deforestation of existing land, and preserve wildlife. We have a robust biodiversity management plan in place to streamline our efforts. Our operational facilities are not located in any of the identified biodiversity protected areas.

Aligning ourselves with the UN Sustainable Development Goals (SDGs) of promoting, preserving, and protecting our biological ecosystems, we have undertaken several biodiversity initiatives at some of our facilities. Recently our initiatives at our Visakhapatnam and Mysuru facilities and a similar initiative at Sriperumbudur factory resulted in a positive biodiversity impact at these locations. Similar initiatives are being undertaken in industrial paint unit located at Taloja in the last few years.

We, as a first step, meet all our regulatory requirement of green belt development and maintain 33% of greenbelt in our plants and facilities.

[40] *GRI 304-1: Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas*

[41] *GRI 304-2: Significant impacts of activities, products, and services on biodiversity*

Case Study

Initiative at Sriperumbudur factory

Working towards our commitment of nurturing local biodiversity, our Sriperumbudur factory undertook several initiatives as a part of a project for preserving and enhancing natural ecosystem.

Some key highlights of this project are:

- An assessment of existing biodiversity at the factory has been conducted by Confederation of Indian Industry – India Business Biodiversity Initiative (CII-IBBI)
- Taxonomic enumeration of biodiversity was carried out
- A Natural Capital Action Plan (NACP) has been prepared by the facility to improve biodiversity in the subsequent years
- It incorporated ecosystem service matrix and biodiversity baseline
- Owing to its biodiversity efforts, the factory has 171 species of flora and fauna, 45 native trees and shrubs species, 30 native herb species, 22 species of butterflies, 26 species of birds
- The factory undertook tree plantation using the 'Miyawaki' technique
- 33% of the area is made available as open area for groundwater water recharge
- The plant won the CII-ITC Sustainability Award for 'Conservation and Sustainable Management of Biodiversity and Ecosystem'

Energy management

We are committed to energy conservation and ensure efficient energy usage at all our operational facilities. Energy management forms a vital part of our approach towards sustainable operations. Our primary focus is on two aspects of energy management: - energy efficiency and RE usage. Our facilities operate with an aim to reduce our energy consumption in the processes which has a direct impact on carbon emissions. In addition to this, we are proud to have an installed capacity of 19.51 MW of rooftop solar.

We continue to make efforts to reduce our specific and total energy consumption by regularly tracking our performance at the individual factory as well as consolidated manufacturing level. We also conduct energy audits at all our manufacturing units at regular intervals and ensure implementation of the audit findings for further improvement.

Energy consumption[42]

Specific electricity consumption for the last four years has been presented in the following table

KWh/KL

Indicator	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Specific electricity consumption	79.77	71.94	76.52	75.70

We aim to achieve reduction in overall energy intensity[43] through our continuous efforts of energy conservation, and we channelise our efforts in every possible way to accomplish it.

[42] *GRI 302-1: Energy consumption within the organisation*

[43] *GRI 302-3 Energy intensity*

Energy conservation[44]

Our resource conservation efforts encompass energy efficiency and use of renewable energy. With an aim to produce sustainable and eco-friendly products for our customers, we take care of making the entire production process sustainable right from the initial stage of sourcing of the resources which majorly includes energy. We have deployed dedicated energy cells at our factories to channelise our energy saving initiatives that are undertaken during the year.

Case Study

Energy conservation through process optimisation

In order to optimize our energy consumption in our production processes and utilities, we take consistent efforts through various measures. We optimised our paint manufacturing process leading to reduction in power consumption.

Case Study

Energy saving through use of alternate technology

Continuing with our efforts towards energy saving we took some of the initiatives as part of our energy conservation plan. Highlights of some of our initiatives have been listed here:

- The air compressor in the utility accounts for substantial utility power consumption. In order to prevent any wastage of energy and save power, we replaced inefficient compressors with better technology compressors
- Our pumping systems were used without the calculation of the actual demand and this resulted in large amount of power. To resolve this issue, we applied a simple principle of 'pumping what is required' and collaborated with few vendors to identify our actual pumping system requirements. Subsequently, we were successful in replacing the conventional system with advanced pressure-based systems. This installation of the new pumping system helped us to save more than 26,500 units of power every month.

Renewable Energy (RE)

Among our many commitments towards environmental sustainability, the use of renewable sources of energy forms an important part. Our total renewable energy installed capacity stands at 39.46 MW. Our substantially augmented investments in renewable energy projects have resulted in RE share of 57.2% compared to 0.1% in FY 2013-14 (against total electricity consumed).

Increasing share of renewable energy in total electricity consumed

%

Indicator	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Renewable energy consumption	35.3	35.3	57.4	57.2

[45] GRI 302-4: Reduction of energy consumption

Emissions[45]

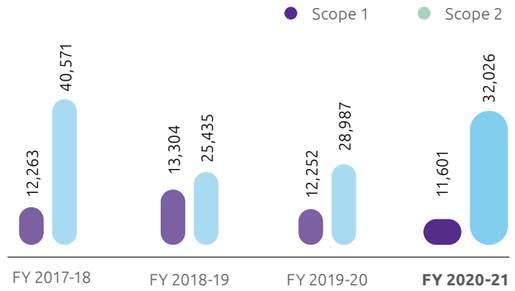
Aligning our emissions management strategy with the global goals of minimising carbon footprint and mitigating climate change risks, we have streamlined our processes to move closer to this common goal. Reducing GHG emissions is not only a business imperative for us at Asian Paints, but also forms a vital part of our environmental strategy going forward. With the use of RE sources, alternate fuel, and energy efficiency efforts, we have been able to reduce our emissions.

GHG emissions

Our absolute Scope 1 emissions have been reduced by 54% whereas our Scope 2 emissions have witnessed a reduction of 39% as compared to FY 2013-14.

GHG Emissions (tCO_2e)

Graphical representation below gives an overview of our Scope 1 and Scope 2 emissions generation since FY 2017-18.[46,47]



Reducing GHG emissions is not only a business imperative for us at Asian Paints, but also forms a vital part of our environmental strategy going forward.

NOx, SOx and other significant air emissions[48]

Apart from reducing emissions at the source, we also have adequate control equipment in place to reduce the impact of the residual emissions. We also comply with all the applicable regulatory requirements to ensure our air emissions are within permissible limits as prescribed in the standards.

Other emissions

g/KL

Parameter	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Particulate Matter (PM)	6.97	4.26	5.05	3.26
Oxides of Nitrogen (NOx)	10.72	12.04	11.79	12.34
Oxides of Sulphur (SOx)	2.78	2.56	2.90	2.64

Waste management[50,51]

We ensure value creation for our customers at every stage of our operations. Waste generation being an inevitable part of our manufacturing process, we take efforts to create value from our waste. With an aim to divert a significant quantum of waste from going to the landfills, we have adopted systems and procedures that help us repurpose used material and reintroduce excess material into our production process. We follow the '3R' strategy of Reduce, Reuse and Recycle for our waste management. Our 3R approach is explained through an illustration.

[46] GRI 305-1 Direct (Scope 1) GHG emissions

[47] GRI 305-2 Energy indirect (Scope 2) GHG emissions

[48] GRI 305-7 Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions

[50] GRI 306-1 Waste generation and significant waste-related impacts

[51] GRI 306-2 Management of significant waste-related impacts

3R STRATEGY

Reduce

Solid waste and industrial effluent (responsible for sludge generation) is reduced at source by efficient handling of raw materials to minimise wastages. Further, coating of equipment with anti-stick coating, regular and advanced equipment cleaning systems, installation of self-cleaning filters are some of the other steps taken.

Reuse

In our attempt to make the most of our waste generation, we undertook several measures. During water-based paint processing, significant amount of wash water is produced while cleaning the processing vessels and liquid material transfer lines. If left unused, these contribute to waste sludge generation during treatment in our Effluent Treatment Plant. We upgraded and automated our waste water handling systems to have capability of re-using these in specific paint processing steps.

Recycle

We minimised the quantity of waste generated by recycling and reusing our non-hazardous waste such as discarded wooden pallets, plastic waste, and packaging material.

We follow legally prescribed procedures and apply environmentally sound disposal techniques for disposing hazardous waste whereas the non-hazardous waste is sold to authorised recyclers.

Hazardous waste

Safe handling and storage of waste is a critical part when it comes to hazardous waste generation. As a responsible corporate citizen, we take utmost care while handling, storing, and disposing our hazardous waste. Our manufacturing units are equipped with waste storage facilities that ensure waste is stored in a proper manner, thereby avoiding any threats posed to the health and well-being of our employees and to our surrounding environment. We ensure full compliance to all applicable regulatory requirements pertaining to hazardous waste management.

Moreover, all our hazardous waste generated is disposed as per the defined methodology. Our methods of disposal include co-processing or pre-processing for usage in cement kilns, incineration, and a very small quantity goes to the landfills. Our hazardous waste footprint has gone down by ~55% since FY 2013-14.

Waste diverted from disposal[53]

	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Total Waste (MT)	1318	1060	824	929

Waste directed to disposal sites

	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Specific hazardous waste disposal (Kg/KL)	1.68	1.44	1.35	1.19

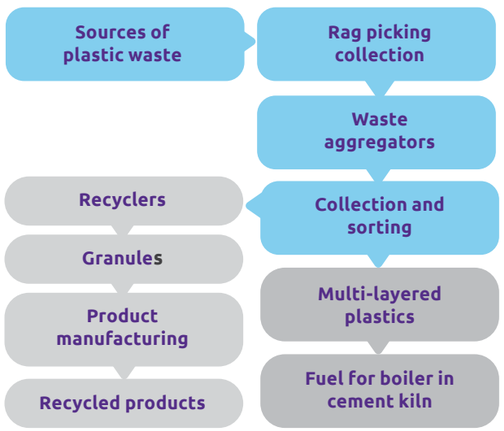
[53] *GRI 306-4: Waste diverted from disposal*

Non-hazardous waste

Reduction of waste is central to our environment management strategy. With effective waste management plans in place, we aim to move towards circular economy replacing the linear economy of 'take, make, and dispose'. Across our value chain, we are in the process of achieving circularity through our efforts right from the initial stage of procuring raw materials and reducing the use of virgin resources. Recycling and reusing our non-hazardous waste such as discarded wooden pallets, plastic waste, and packaging material have enabled us to minimise the quantity of waste that gets diverted to landfills. We have sold total non-hazardous waste amounting to 8,437 MT generated during FY 2020-21 to authorised recyclers as per applicable regulations[54].

As a leading manufacturer of paints industry, it is a business imperative for us at Asian Paints to ensure safe disposal of our post-consumer products. Ensuring compliance with the Plastic Waste Management (PWM) rules, we follow the Extended Producer Responsibility (EPR) approach to manage our plastic packaging waste generated as a result of our downstream operations. With this, we were able to collect and recycle over 2,798 tonnes of post-consumer flexible plastic waste across 15 states representing 100% of our flexible plastic packaging quantity for the previous year. We have utilised the network of waste pickers, recyclers, and co-processors to further optimise our efforts in this direction.

Our EPR waste management system



Wastewater management[55]

Industrial effluent is generated during paint processing and afterwards during equipment and pipeline cleaning. Source reduction is our major area of focus followed by reuse[56] of wash water back in our process. Whatever effluent cannot be reused is recycled in our ETP and advanced treatment systems. This recycled water is then utilised to fulfil both process and non-process requirements. All our decorative manufacturing sites are zero liquid discharge facilities.

During FY 2020-21, we faced the challenge of increased generation of wastewater due to shut down and start-up of operation in our factories due to COVID-19. However, with increased focus on wastewater management initiative, we were able to limit the overall increase. Our specific industrial effluent has reduced by 75.9% since FY 2013-14 owing to our continued efforts in this direction.

Specific industrial effluent (trend Lt/KL)

Effluent water	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Specific industrial effluent (Lt/KL)	22.62	18.51	19.17	19.9

Specific industrial effluent(Lt/KL)- industrial effluent per unit of production

[54] *GRI 306-5 Waste diverted to disposal*

[55] *GRI 303-2 Management of water discharge-related impacts*

[56] *GRI 303-3 Water recycled and reused*