

# Sustainability at UPL

July 2021

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Working with farmers  
in 130+ countries to  
help them feed the  
world sustainably





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UPL Sustainability Goals

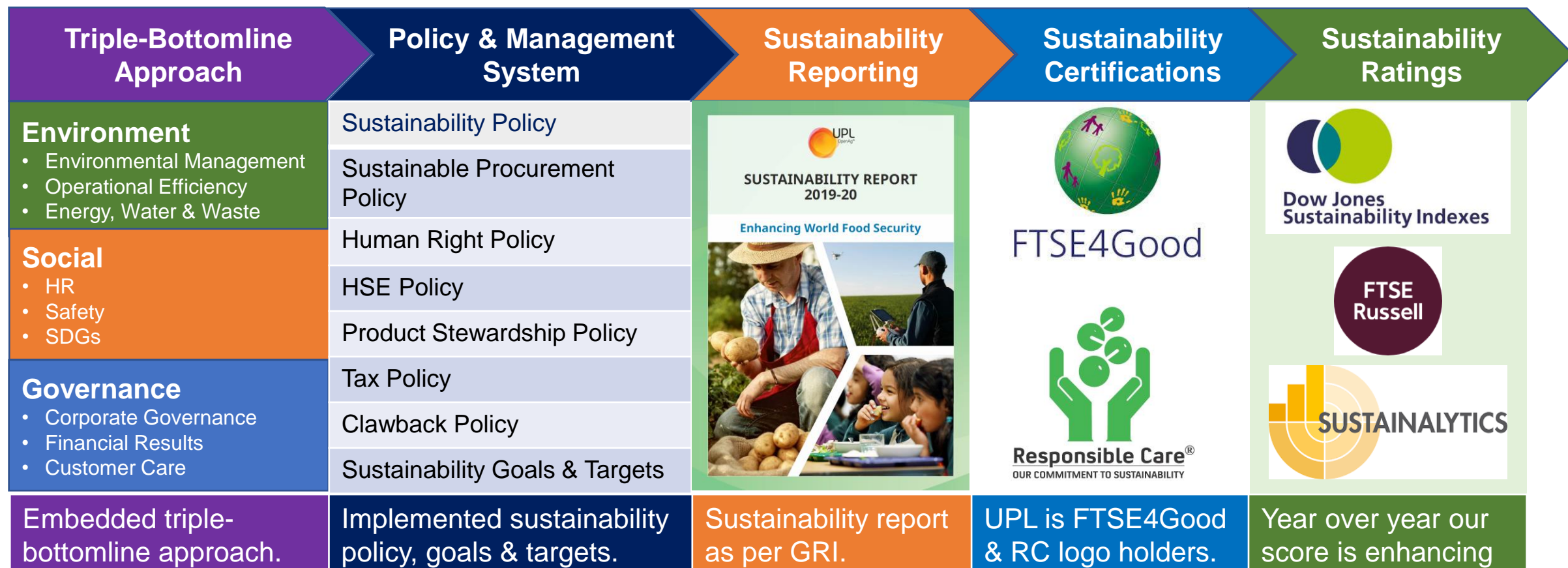
Goal 1  
Reduce Environmental  
Footprint

Goal 2  
Enhance World Food  
Security

Goal 3  
Enhance Sustainable  
Sourcing

Goal 4  
Strengthen Community  
Wellbeing

# Embedding Sustainability @ UPL



## At UPL

- We adopted structured approach towards Sustainability.



# International Sustainability Rating



UPL included in  
**DJSI Sustainability Yearbook 2021.**



UPL **Ranked No.1** among all  
Agrochemicals globally in 2020.



UPL is logo holder of  
**FTSE4Good .**

**UPL sustainability rating has enhanced year over year from last 5-years.**

# Sustainability Performance @ Manufacturing



**Reduced 17%**

Sp. Water Consumption  
from baseline FY 2015-16.



**Reduced 27%**

Sp. Carbon Emission  
from baseline FY 2015-16.



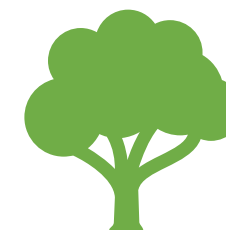
**Reduced 43%**

Sp. Waste Disposal  
from baseline FY 2015-16.



**19% electric power**

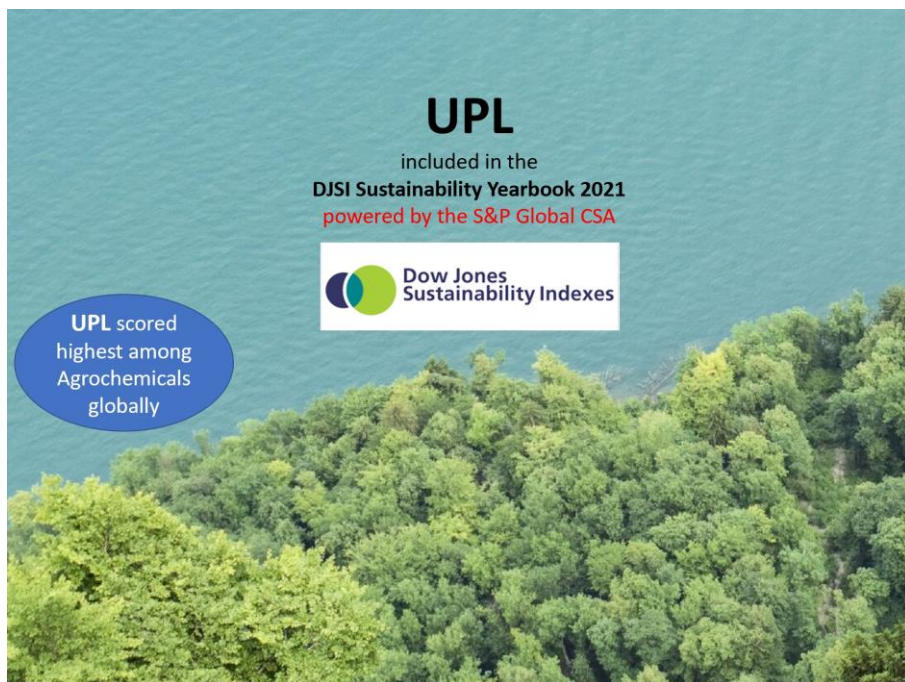
comes from renewable sources in  
our largest two manufacturing plants.



**11,987 MT/annum**  
**Carbon sequestered**  
With the help of tree  
plantation.



# Sustainability Performance



UPL, only Agrochemical company in the World included in the **DJSI Sustainability Yearbook 2021** powered by the S&P Global CSA for demonstrating excellence in sustainability.



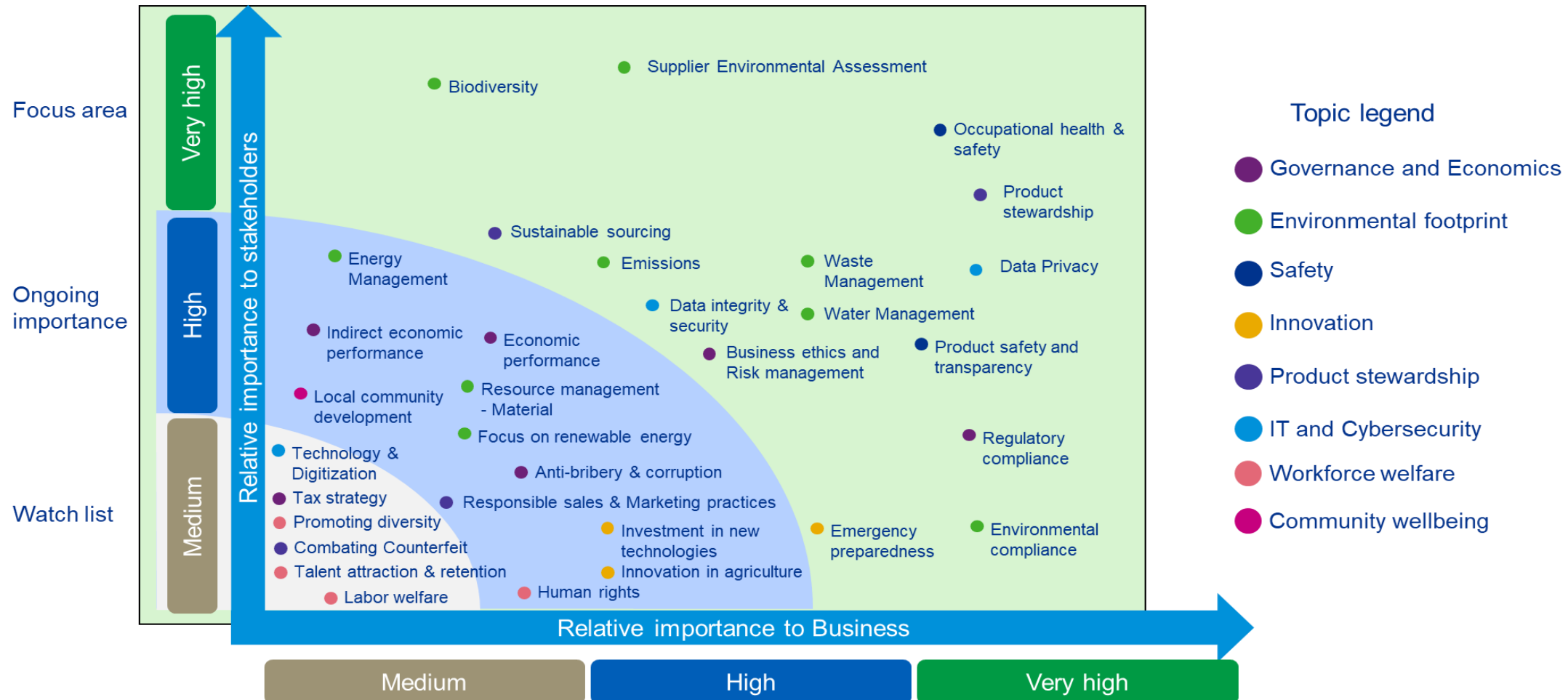
UPL received the **Asian Sustainability Leadership Award 2021** for Excellence in Sustainability Performance Management.



UPL received **FICCI Chemicals and Petrochemicals Awards 2021** for sustainability in best green processes.

# Materiality Assessment- FY2020-21

Our materiality methodology is guided by the Global Reporting Initiative (GRI) standards, encompassing sectoral, regional, national and global perspectives. We undertook a detailed and fresh stakeholder engagement and materiality assessment in FY2020-21 to identify the most relevant issues to business and UPL's environmental, social and governance impact.



# Aligning our targets with our revised material topics

## FY2020-21



### Governance and Economics

- ☐ Business ethics & Risk Management
- ☐ Regulatory compliance

### Environmental footprint

- ☐ Emissions
- ☐ Water management
- ☐ Waste management
- ☐ Supplier environmental assessment
- ☐ Environmental compliance

### Innovation

- ☐ Emergency preparedness

### Safety

- ☐ Occupational Health & Safety
- ☐ Product safety and transparency

### FY2025 Target

- ❖ Reduce 20% specific water, 25% specific CO<sub>2</sub> & 25% specific waste from baseline FY2019-20

### Product stewardship

- ☐ Sustainable Sourcing

### IT and Cybersecurity

- ☐ Data integrity and security
- ☐ Data Privacy

### Workforce welfare

- ☐ Talent attraction and retention
- ☐ Human rights

### Community well-being

- ☐ Local community development

### FY2025 Target

- ❖ Achieve 50% revenues from innovative and sustainable solutions to enhance yields and quality

### FY2025 Target

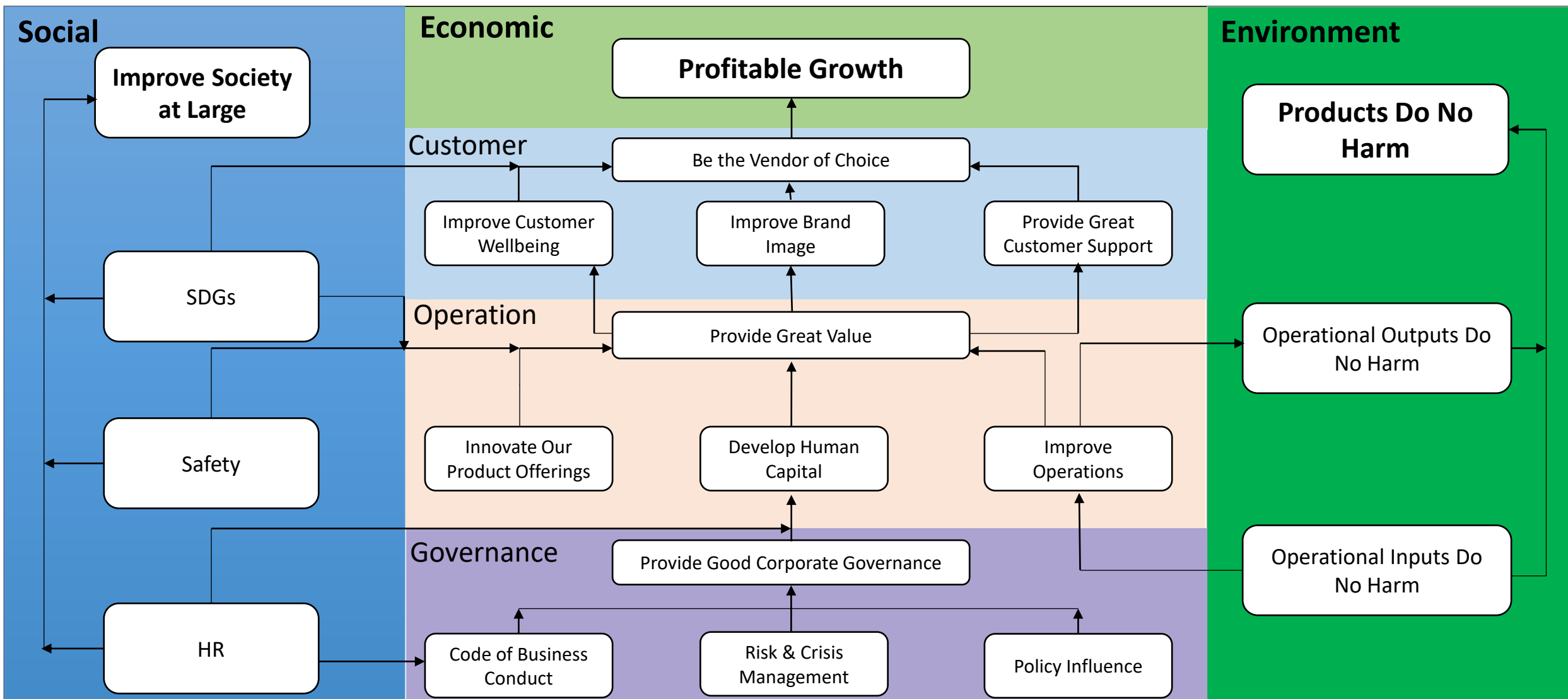
- ❖ Achieve 60% Sustainable sourcing

### FY2025 Target

- ❖ Impact 3 million lives through livelihood, education, health and sanitation



# Our Sustainability Strategy



# Product Stewardship at UPL

## UPL's Product Stewardship Policy

Presence of 7 robust product stewardship principles that represent the cornerstone of UPL's Product Stewardship Policy.

UPL's Product Stewardship Policy aims to support all employees to ensure responsible and ethical management and use of products, based on high-quality standards.



### Insights into the 7 principles of our product life cycle approach

#### Research & Development

- ❖ Development of safe and environment-friendly products starts from soil health and plant protection chemicals to post-harvest solutions, among others.
- ❖ Enhanced focus on improved efficacy and safer toxicological, ecotoxicological and environmental aspects.
- ❖ Regular product testing for product regulatory authorizations across countries in which the company operates.

#### Responsible Use

- ❖ Conduct comprehensive and periodic training programmes for employees and customers to ensure responsible management of UPL's products, across their entire life-cycle.
- ❖ Any unapproved use or misuse of the product is immediately addressed and reported to requisite functional heads to ensure minimized impact for the company and its stakeholders.

#### Container Management

- ❖ Encourage the safe disposal of empty packages and containers in line with local and international laws.
- ❖ Promoting container re-cycling and disposal programs as per local laws.

#### Integrated Crop Pest Management

- ❖ Implementing cost-effective crop pest management measures to enable food security, economic sustainability, residue management and resistance management.

#### Manufacturing

- ❖ Ensure regular monitoring and control of waste, emissions and effluents in line with national and international regulations and guidelines, across all manufacturing and formulation plants.
- ❖ Implementation of adequate technological controls and internal capabilities to enhance the Quality Health Safety and Environment (QHSE) Management System
- ❖ For third party manufacturers, we ensure adherence to product stewardship compliance among other contractual obligations

#### Packaging, Storage & Transport

- ❖ Product packaging, storage and transportation is undertaken in adherence to relevant local and international laws.
- ❖ Incorporation of requisite Quality, Health, Safety and Environment (QHSE) parameters for the use of packaging materials for purchased goods, intermediaries and finished products.
- ❖ Ensure reasonable packaging materials to cater to the requirements of customers, particularly small-scale farmers.

#### Disposal of Obsolete Stock

- ❖ Encourage the safe disposal or incineration of obsolete stocks of products.
- ❖ Ensure compliance with required regulatory permits, conditions or approvals.
- ❖ Pioneered the installation of the first incinerator and landfills to appropriately treat and dispose of waste.



## PRODUCT STEWARDSHIP

### POLICY AND KEY REQUIREMENT

JANUARY 2020



# Product Stewardship at UPL

At UPL, we are cognizant of the impact that our business activities have on the environment and communities around us. Furthermore, we are aware of our responsibility to integrate sustainability across our business activities and products. We consistently strive to build a product portfolio that is energy and resource efficient to enable a positive environmental footprint. With our farmers at the heart of all our business activities, we also aim to invest in cost efficient products for all our beneficiaries.

## Key insights into our responsible product portfolio



ProNativa

- ❑ An exclusive crop health solution which integrates natural biosolutions such as bioprotection, biostimulants and bionutrition with existing crop protection products to meet the increasing needs of farmers.
- ❑ The programme aims to cover plant requirements throughout the season or at a specific development stage of the crop.
- ❑ The application includes separate or combined applications of BioSolutions and crop protection products via seed treatment, in-furrow, fertigation or foliar spray.
- ❑ ProNativa provides better, higher yields with less incidence report of phytotoxicity and lower residual level despite high effectiveness.



ZEBA

- ❑ Patented, starch-based, superabsorbent soil enhancement that is designed to ensure a constant supply of moisture available to germinating seed, seedlings, and plants throughout the growing season.
- ❑ Aims to have a positive impact on soil health in addition to reducing the use of irrigation water.
- ❑ Positively impacts soil microbiome and supports the soil food web with the advantage of its biodegradable nature.
- ❑ Reduces nutrient leaching, promotes greater plant root and biomass development as well as consistent plant size and crop quality across fields.
- ❑ Reduces stress caused due to heat and lack of moisture during hot and dry periods.



Farmer Engagement Initiatives

- ❑ Implementing a myriad of local awareness, engagement and training initiatives to ensure small-scale and marginal farmers are updated on the latest farming practices that are easily accessible to them.
- ❑ Adarsh Farm Services aims to provide high-tech tractor-mounted spray equipment that enables a significant reduction in time and propels cost savings for farmers. The services provided also aim to minimize crop damage.
- ❑ Adarsh Kisan Centre, a remote advisory contact centre for farmers has a robust presence across Mumbai, Chandigarh and Vizag. These centres aim to resolve crop-related farmer queries, concerns or issues across India.
- ❑ UPL Centre for Agriculture Excellence (CAE), Nahuli provides free training on modern scientific agriculture practices, along with requisite accommodation measures for farmers or agriculture students from India or overseas.



# Product Stewardship



**Saved 237 bn liter Water**  
through UPL's Zeba technology



**Saved 25% Product Consumption**  
through UPL's Spraying services



**Saved 45 lac tons Potatoes**  
through UPL's Post Harvesting solutions

**Our Target is to achieve 50% revenue from innovative and Sustainable Solution to enhance agriculture yield.**



# Environmental Stewardship at UPL

As a responsible corporate citizen, we aim to bridge progress and enhance sustainability for all our stakeholders. We consistently strive to augment resource conservation and capitalize on opportunities to build resilience across our business activities and product portfolio. In this regard, we have further aligned our business activities to our sustainability goals and 2025 targets in order to mitigate environmental risks and enable positive environmental impact.

## Energy Efficiency

Total Energy Consumption	FY2018-19	FY2019-20	FY2020-21
A.Non-renewable fuels (MWh)	2,058,632	2,307,410	2,228,607
B.Non-renewable electricity purchased (MWh)	236,544.1	241,946.078	305,064
C.Non-renewable energy purchased (MWh)	1710.668	40,050.189	51,958
D.Total renewable energy purchased or generated (MWh)	8,397.784	26,771.201	44,892
E.Total non-renewable energy sold (MWh)	0	9,450.63	11,510
Total non-renewable energy consumption (MWh) (A+B+C)	2,296,877.768	2,579,955.637	2,574,119
Total costs of energy consumption (INR)	4,352,461,319.27176	5,150,000,000	5,810,000,000

## Carbon Emission Management

Scope of emissions (metric tonnes CO2 equivalents)	FY2018-19	FY2019-20	FY2020-21
Direct emissions (Scope 1)	624,569	710,656.641	712,047.39
Indirect emissions (Scope 2)	148,785	184,315	226,824



# Environmental Stewardship at UPL

## Water Management

Water Consumption	FY2018-19	FY2019-20	FY2020-21
Water withdrawal-Municipal supply (Million cubic meters)	4.308	4.620	5.047
Water withdrawal-Fresh surface water (Million cubic meters)	0	1.276	0.446
Water withdrawal-Fresh groundwater (Million cubic meters)	0.032	0.098	0.061
Total net fresh water consumption (Million cubic meters)	4.34	5.994	5.554

## Waste Management

⊗  
24,521 MT of non-hazardous waste was recycled or sent for co-processing

⊗  
136,134 MT total hazardous waste generated

⊗  
16,166 MT of hazardous waste was recycled or sent for co-processing

⊗  
12,284 MT total non-hazardous waste generated and disposed



# UPL Initiative for Sustainable Agriculture



## UPL's ESG-friendly biological product portfolio

Enhanced Biological Offerings Through The Strategic Acquisition Of Arysta

### BioControl: Technology Platform

**CUPROFIX**  
DRY FLUORABLE  
FUNGICIDE-BACTERICIDE

#### Mineral

- Targets downy mildew type diseases and bacterial diseases
- Fixed copper base registered across the world

**MICROTHIOL**  
MICRONIZED METABOLIC SULFUR

#### Mineral

- Targets powdery mildew and other diseases
- Patented micro-dispersion formulation technology delivering superior product quality

**NOCTOVI**  
NATURAL OIL EXTRACT FOR PLANT PROTECTION

#### Plant Extract

- Targets downy mildew type diseases and bacterial diseases
- Fixed copper base registered across the world

**Vacciplant**

#### Active substance extracted from seaweed

- Registered in over 16 countries
- Stimulates the natural defense of plants with no residue
- Patented product, with EU / Annex 1 inclusion

**Carpovirusine**

#### Virus extracted from larvae

- Targets codling moth and oriental fruit moth with over 24 registrations globally
- Virus-based, sustainable reference

**Ph-D**

#### Active substance extracted from fungus

- Targets botrytis, Alternaria, powdery mildew etc. in tree nuts, fruits, berries and pome fruits
- Bacteria based microbial

**Kasumin**

#### Aminoglycoside antibiotic

- Targets bacterial diseases including streptomycin resistant bacteria. Aminoglycoside antibiotic registered in 20 countries for plant use. Not effective on human and animal diseases

### BioStimulant: Technology Platform

**Macarena**

#### Metabolically Active Compounds

- Protects plants from overproduction of ROS under stress
- Optimize gene expressions by up and down regulating

**BIOZIME TF**

#### Plant Extract

- Seed treatment and foliar applications for increased yield and marketable quality
- Registered in over 28 countries

**BM START**

#### Seaweed Extract

- Secures fruit setting and increases fruit setting quality, leading to improved marketable yield
- Can help reduce cold weather impact during flowering

**ZEBA**

#### Corn Starch Based

- Patented superabsorbent soil enhancement to keep a constant supply of moisture to germinating seed, seedlings, and plants throughout the growing season

**ATONIK**

#### Nitrophenols

- Helps manage climatic stress, with increased biomass accumulation and photosynthetic activity

**HeadSet**

#### Seaweed Extract

- Physioactivator of nutrition with optimal behavior of the upper leaves, with excellent performance in rice



# Recent Successes (Sustainable Technologies)

## New Sustainable Technology Sourcing, Piloting & Deployment



### Scaleban

Implemented to recycle ETP treated water into cooling tower upto 250000 ppm TDS. This help us to reduce abstracted water demand in cooling tower.



### Volute

Implemented for efficient dewatering of ETP sludge. This will help us in efficient management of sludge dewatering in our effluent treatment plant.



### DAF-MBBR

Implemented for efficient biological treatment of wastewater. This help to reduce area occupancy & operating cost.

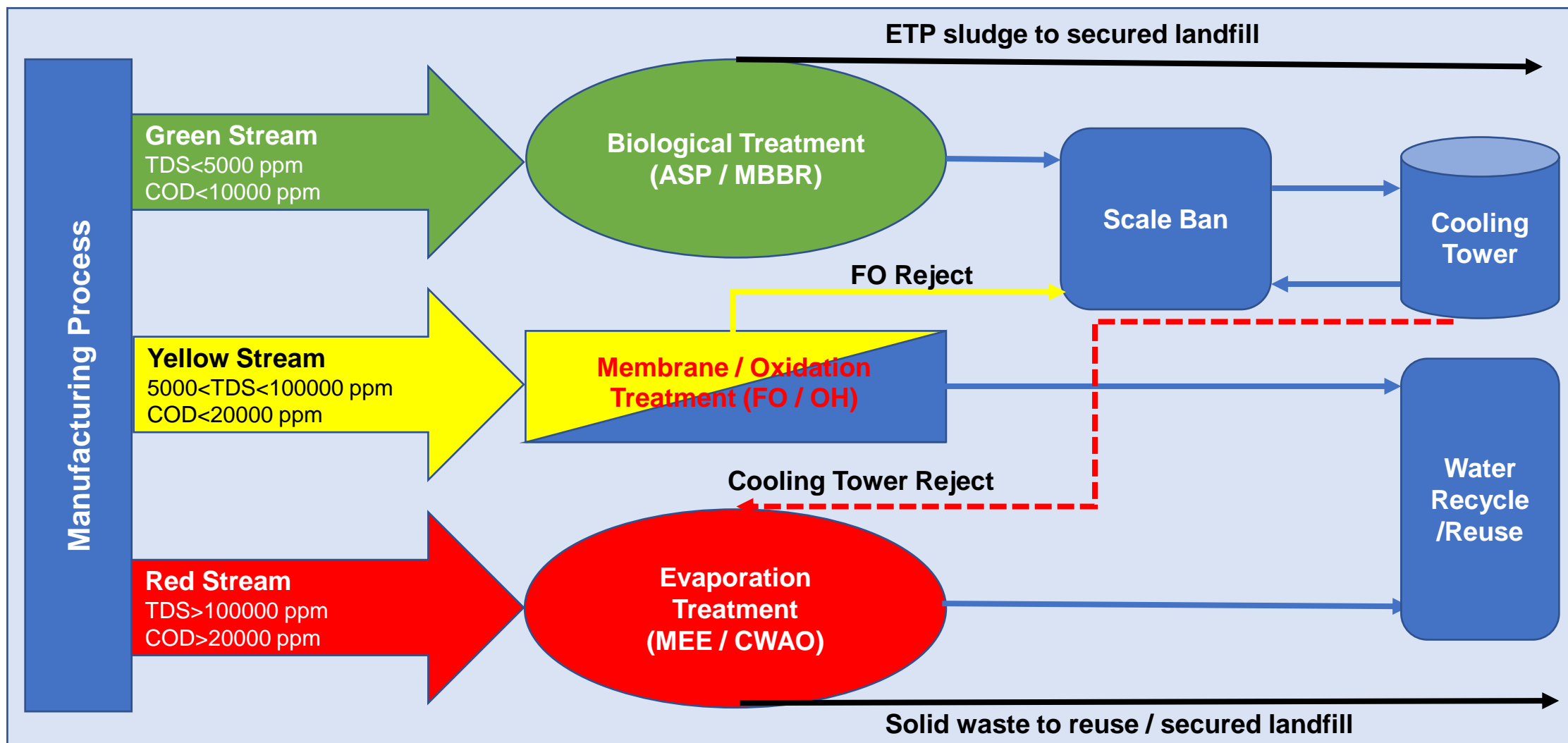


### FO Technology

Implemented for efficient treatment of high TDS & low COD effluent stream. This help us to enhance reuse & recycling of treated wastewater.

**1<sup>st</sup> among agrochemical companies in the World, successfully implemented these new sustainable technologies to reduce the environment footprint of our manufacturing plants.**

# Recent Successes (Sustainable Wastewater Treatment Scheme)



Wastewater stream identification, characterization, segregation & treatment is key to manage complex effluent.



# Recent Successes (Rainwater Harvesting & Reuse)



Rainwater Harvesting at Unit 0



Rainwater Harvesting at Unit 1



Rainwater Harvesting at Unit 2



Rainwater Harvesting at Unit 4

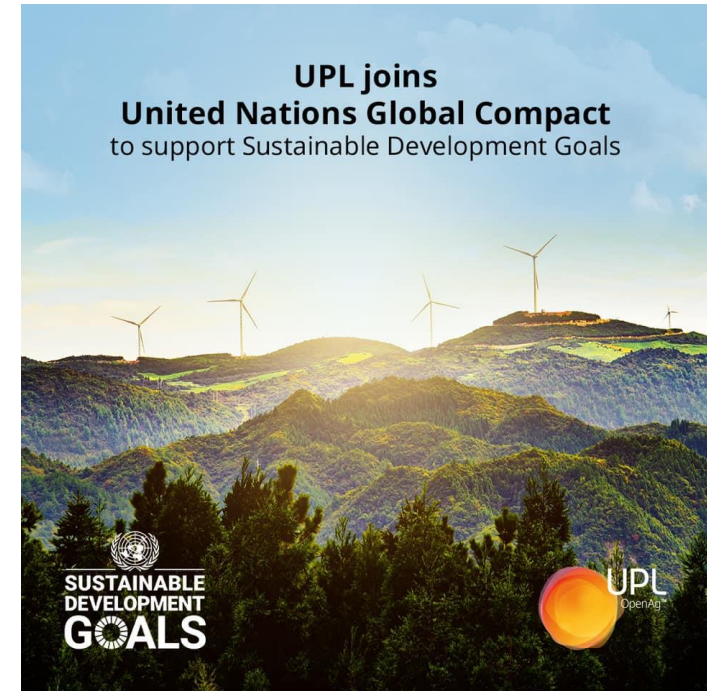
Rainwater Harvesting & Reuse systems are installed in our manufacturing plants to decrease abstracted water demand and reduce dependency on ground & tanker water.

# Committed To Set SBTs



SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION



UPL has signed commitment letter to set science-based targets to keep global temperature increase below 2°C.

# Our Priority SDGs

## Our Sustainability Ambition



The United Nations adopted the 'Agenda 2030' with a total of 17 Sustainable Development Goals (SDGs) in September 2015 to end poverty, protect the planet, and ensure prosperity for all.

Our ambition is to achieve the 'UN Sustainable Development Goals' to transform our world.

We have identified five priority SDGs for UPL among 17 SDGs.





# UPL Sustainability Goals By 2025

## Sustainability vision

Working with farmers to help them feed the world sustainably

## Goals by 2025



# Goal 1: Reduce Environmental Footprint

## 2025 Target

Reduce manufacturing environmental footprint from baseline FY2019-20.

- Reduce 25% Sp. CO<sub>2</sub> emission.
- Reduce 20% Sp. Water consumption.
- Reduce 25% Sp. Waste disposal.

### Priority SDGs



## FY2021-22 Targets

### Reduce over FY2019-20

Specific CO<sub>2</sub> emission by

10%↓

Specific water consumption by

10%↓

Specific waste disposal by

10%↓

## Projects for FY2021-22



### CO<sub>2</sub> reduction

- Utilisation of biomass as a source of energy: Working on installing a biomass boiler for steam generation
- Recycling 100% plastics used in packaging
- Use of renewable energy through green power purchase agreements
- Process and technology innovation to reduce CO<sub>2</sub> emission



### Water consumption reduction

- Scale-Ban technology to reduce cooling tower water demand
- Rainwater harvesting to reduce abstracted water demand
- Recycling and reuse of green effluent stream
- Forward Osmosis technology for effluent recycling



### Waste disposal reduction

- Reduce moisture in ETP sludge from 70% to <25%
- Biological treatment of incinerable waste, U4 & U5
- Zero liquid discharge at one of our units in India
- Wastewater stream identification and segregation

Note: Specific is a measure per MT of production

# Goal 2: Enhance World Food Security

## 2025 Target

Achieve 50% revenues from innovative and sustainable solutions to enhance yields and quality

## FY2021-22 Targets

Achieve 30% revenues from innovative and sustainable products

## Projects for FY2021-22

### R&D

- New products and mixtures to address farmer pain-points
- OpenAg Center: Technology Partnering, Bio-solution R&D
- Expanding network on Field Research Station

### Digital and Technology Innovation

- Collaborations for developing precision agriculture tools
- Plant Stress & Stimulation: Sea Weed Extract, Zeba
- Cross Technology Solutions: Pronutiva

### Farm to Fork

- Collaborations for Sustainable Farming: Potato, Chilli, Groundnut, Sugarcane

### Farm Services

- Spraying service covering ~2 mn acres with target to reach 25 mn acres by 2025
- Farm Advisory

## Priority SDGs



We aim to contribute to food security by supporting farmers with our product and service portfolio to feed the world sustainably



# Goal 3: Enhance Sustainable Sourcing

## 2025 Target

60% sustainable sourcing

## FY2021-22 Target

25%

sustainable sourcing

**Sustainable Procurement: Results of Initial dipstick Supplier Survey**

82

Number of suppliers covered

~₹ 2,600 crore

Equivalent spend (US\$ 370 million) (20% spend)

## Priority SDGs

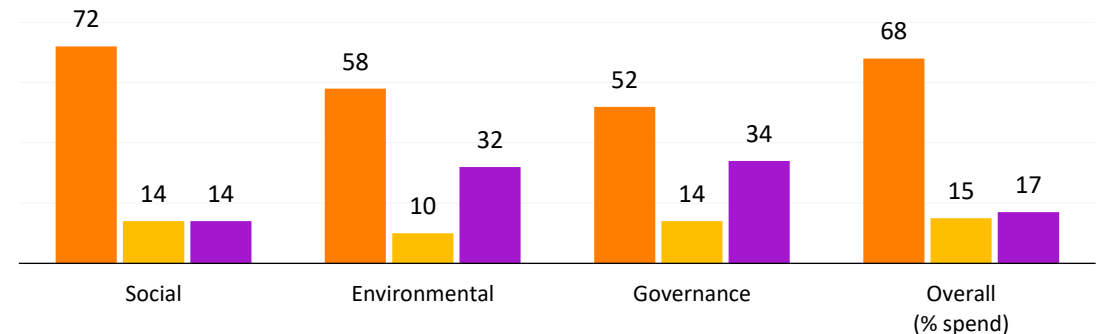


## Action Plan for FY2021-22

### Procurement from sustainable suppliers

- Policy, framework and toolkit development.
- India, where 40% of our manufacturing is based, will be our key priority for FY2021-22
- Explore and initiate ISO20400 implementation

## % suppliers categorized under ESG Parameters (82 suppliers)



- Leaders: score above 60%
- At par with industry: score 40-60%
- Sensitive: score less than 40% (need improvement)

# Goal 4: Strengthen Community Wellbeing

## 2025 Target

**Impact 3 million lives through livelihood, education, health and sanitation**

## FY2021-22 Target

**Impact 1.5 million lives**  
through community initiatives

## Projects for FY2021-22

- **One Billion Hearts Initiative** at Côte d'Ivoire with The Heart Fund to provide universal access to **cardiovascular health** for 1 billion people by 2030.
- Promote and raise awareness about **sustainable development in agriculture and education** in society through football with FIFA Foundation
- Partnership with **Oxford India Centre for Sustainable Development (OICSD)** at Somerville College, University of Oxford, UK to advance education on sustainability with a greater focus on small-holder farmers in the developing world
- Establish **Centre of Excellence (COE)** on process safety management
- Backward and forward linkages for farmers through formation, nurturing and strengthening of **Farmers Producer Company**

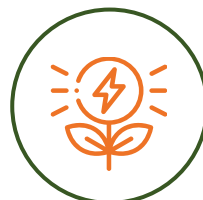
## Priority SDGs



Our CSR initiatives has four focus areas:



**Institutions of excellence**



**Sustainable livelihood**



**Nature conversation**



**Local and national area need**

# Sustainability Awards



**Asian Sustainability Leadership Award**



**Best Sustainable Water Management Award**



**FICCI Best Green Processes Award**



**UPL Vietnam Plant awarded with Gold Award for Green Factory**



# Thank you

Queries may be directed to: **Dr. Mritunjay Chaubey**

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