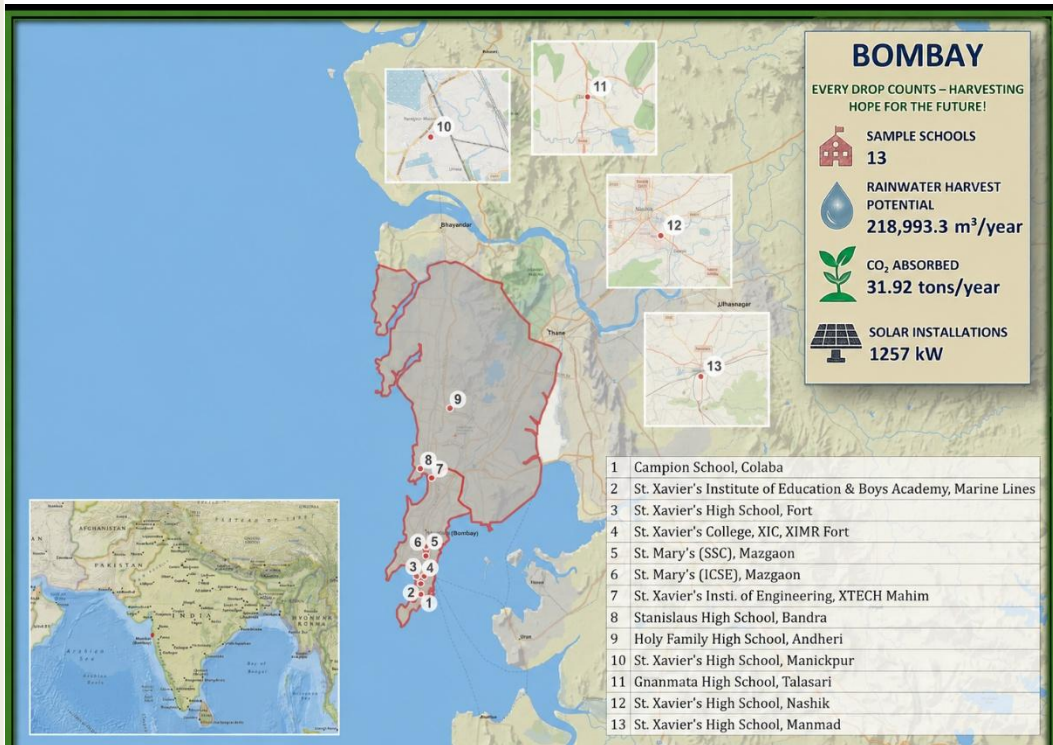


Policies For A Sustainable School



BabaPrasad Lanka
Gerry Mascarenhas
John Neelankavil

June 20, 2026

Let's build the session together

www.menti.com



Enter the code to join

It's on the screen in front of you

|1234 5678

Join



Thanks for joining!

Sign up for Mentimeter

View the results

- **Foundation**
- **Vision of a Sustainable School**
- **Water Positive**
- **Carbon Neutral**
- **Zero Waste to Dumpsite**
- **Biodiversity Enhancing**
- **Next Steps**

Why Are We Here?

Our Foundation: Values that Inspire Action



1 Universal Apostolic Preferences (UAPs)
Caring for Our Common Home



2 Laudato Si' Goals



Global Jesuit commitment to ecological responsibility and sustainable living.

A framework for translating ecological commitment into measurable action.

How Are We Responding?



3 SEAL Network
(West Zone Ecology Platform)



Create leaders through an Eco Club in each Jesuit School, that will network with other Schools intra-Province and inter-Provinces.

<https://ecosjwestzone.org/>



4 Eco Clubs 2.0
From Activities to Policies



Embedding sustainability through changes in school-wide practices and behaviour. Building long term habits based on Science.

“The SEAL network has formulated 4 policies that can help to make each Jesuit School Eco Club effective in its Ecology work.

I thank Fr. Frazer Mascarenhas, Baba Prasad Lanka, the Province Social Justice and Ecology Commission and all those who participated in finalizing these Policies. I ask the Commission to oversee the implementation of the Policies.”

Fr Anil Pereira, Provincial Bombay Province

- Foundation
- **Vision of a Sustainable School**
- Water Positive
- Carbon Neutral
- Zero Waste to Dumpsite
- Biodiversity Enhancing
- Next Steps

What is a Sustainable School?



WE DID NOT INHERIT THE EARTH FROM OUR ANCESTORS;
WE ARE BORROWING IT FROM OUR CHILDREN.



INHERITANCE MINDSET



Resources are ours
to use



Focus on present
comfort, convenience



Consumption without
Accountability

Demand Increase,
Resource depletion



Resources are entrusted
to us



Balance present needs
with future well being



Responsible use and
Regeneration

Borrow Wisely

What is a Sustainable School?



**WE DID NOT INHERIT THE EARTH FROM OUR ANCESTORS;
WE ARE BORROWING IT FROM OUR CHILDREN.**



INHERITANCE MINDSET



Water is always available



Longer showers are normal



Leaks can wait



Gardens can be overwatered



Consumption is somebody else's responsibility

LOAN MINDSET



Every Litre is borrowed from future



Use water efficiently



Fix leaks quickly



Reuse treated water where possible



Measure and manage consumption

VISION OF A SUSTAINABLE SCHOOL



WATER POSITIVE

- Harvests more water than consumed fresh water



CARBON NEUTRAL

- Minimizes emissions and offsets the rest



ZERO WASTE TO DUMPSITES

- Composts, recycles, and avoids sending waste to landfills



BIODIVERSITY ENHANCING

- Maintains gardens and habitats for birds & insects

A SUSTAINABLE SCHOOL NEEDS ALL OF US



A school does not become sustainable because students switch off lights.



A school does not become sustainable because management installs solar panels.



A school becomes sustainable when infrastructure, policies, teachers, and students all work together.



Inculcating long term habits , in our students, based on Science



POLICY DOCUMENT - AT A GLANCE

A simple guide to understand each section

0



GOAL

What we ultimately wish to achieve

1



**PURPOSE &
ALIGNMENT**

Why this policy is important and how it aligns with broader vision

2



**SCOPE
(WHO &
WHAT IT
COVERS)**

Who is involved and what areas the policy applies to

3



**DEFINITIONS
& METRICS**

What Key Terms mean and how progress will be measured

Policy: Elements of Policy Document at a Glance



What measurable outcomes we aim to accomplish over the next three years?

How the goals will be translated into systems, practice, and every day behaviour

Who is responsible for planning, execution and support

What Key Terms mean and how progress will be measured

How we ensure adherence to the policy while continuously improving over time

Per Capita Measures : Why do they matter?



Per Capita Measures convert
“*How big we are*” into “*How well we operate.*”



1. LOOK BEYOND THE TOTALS

Large numbers tell us scale.
Per capita numbers tell us **performance**.

EXAMPLE:



Total water consumption
= *How much is used*



Water use per person
= *How efficiently it is used*



2. REVEAL REAL PERFORMANCE

Per capita indicators help us understand:



Behaviour

How individuals and groups use resources and respond to initiatives.



Efficiency

Whether resources are being used wisely and effectively.



Culture

The values, habits, and practices embedded within an institution or community.

Per Capita Measures : Why do they matter?



Per Capita Measures convert
“How big we are” into *“How well we operate.”*



3. MEASURE BOTH ROUTINE & EVENTS

ROUTINE BEHAVIOUR

- Daily energy use
- Water consumption
- Waste generation
- Resource utilization

EVENT BEHAVIOUR

- Campaign participation
- Special drives
- Environmental initiatives
- Community actions



4. USEFUL INPUTS FOR POLICY MAKING

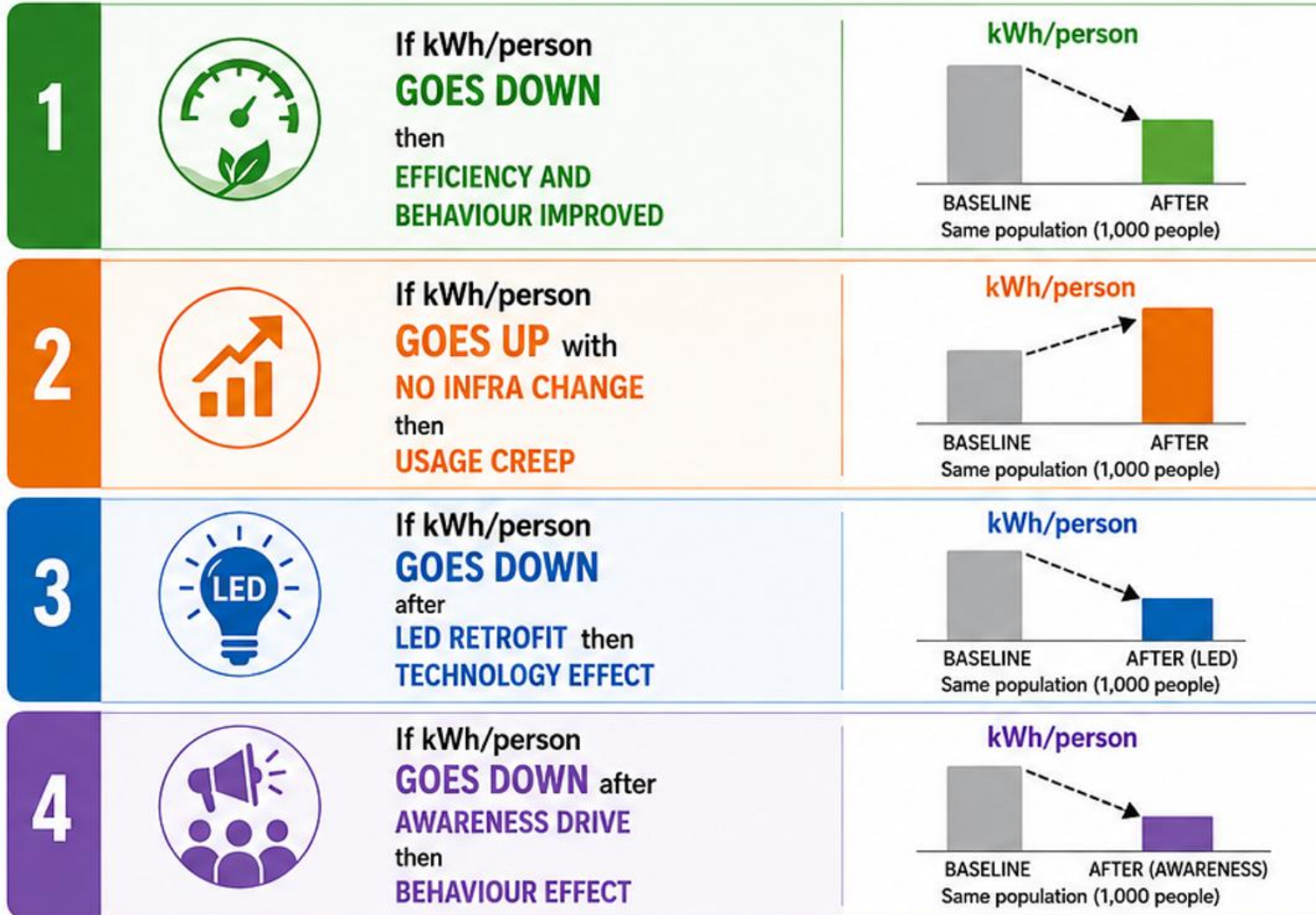
Per capita measures
provide evidence for:

- Setting realistic targets
- Identifying priority areas
- Comparing performance fairly
- Tracking progress over time
- Designing effective policies



Per Capita Measures : How to Read ?

$$\text{Per Capita Energy Use (kWh/person)} = \frac{\text{Total Energy Use (kWh)}}{\text{Population (people)}}$$



Connecting Institutional Policies to Student Behaviour to build long term habits based on Science

- Foundation
- Vision of a Sustainable School
- **Water Positive**
- Carbon Neutral
- Zero Waste to Dumpsite
- Biodiversity Enhancing
- Next Steps

VISION OF A SUSTAINABLE SCHOOL



WATER POSITIVE

- Harvests more water than it consumes



CARBON NEUTRAL

- Minimizes emissions and offsets the rest



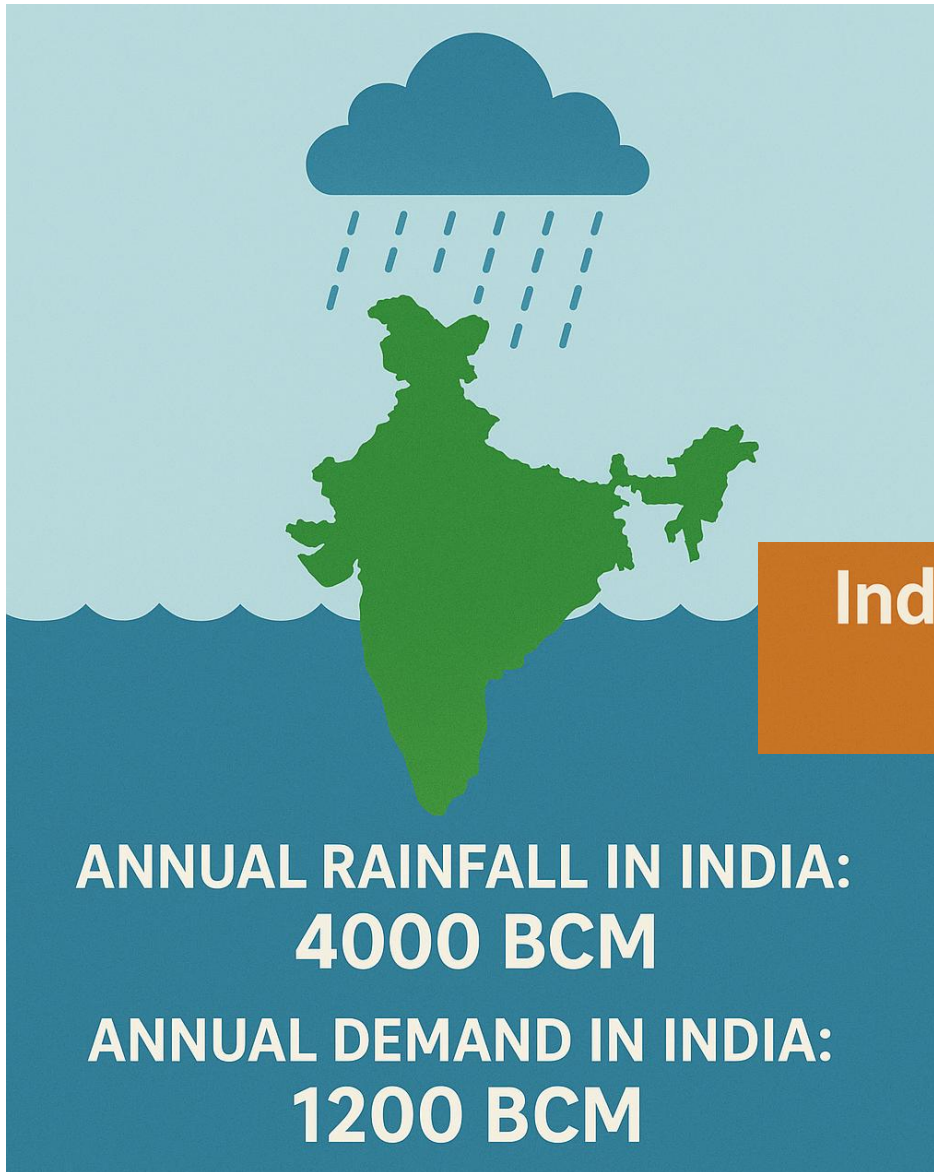
ZERO WASTE TO LANDFILLS

- Composts, recycles, and avoids sending waste to landfills



BIODIVERSITY ENHANCING

- Maintains gardens and habitats for birds & insects



India is **Monsoon rich**
but water poor

In addition to a rising population.....



About **80%**
of Rainfall drains
to sea



Less than
10%
Rainwater
harvested
annually

About **72%**
Waste Water
is untreated

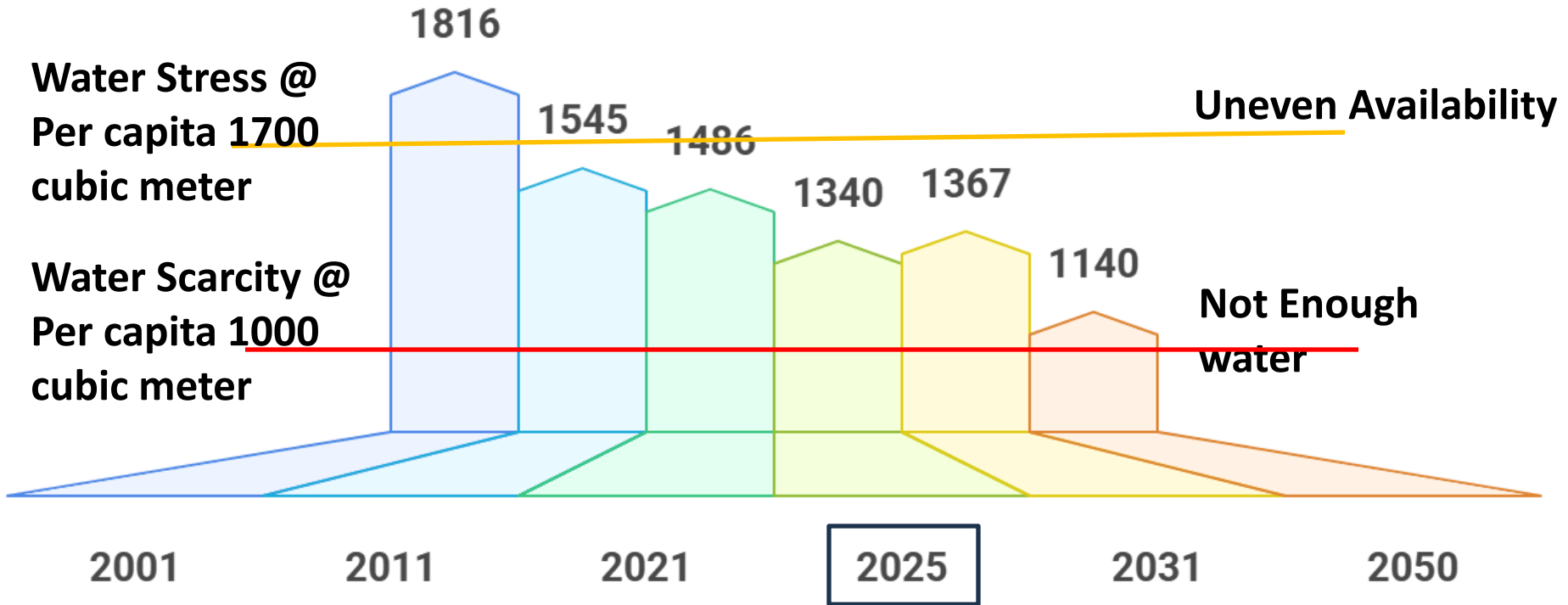


About **40%**
Municipal water
lost in leakage



60%
Districts
over extract
ground water

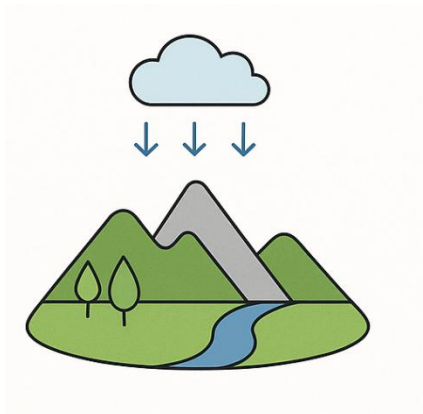
Per Capita Water Availability in cubic meter



India in Water Stress Zone

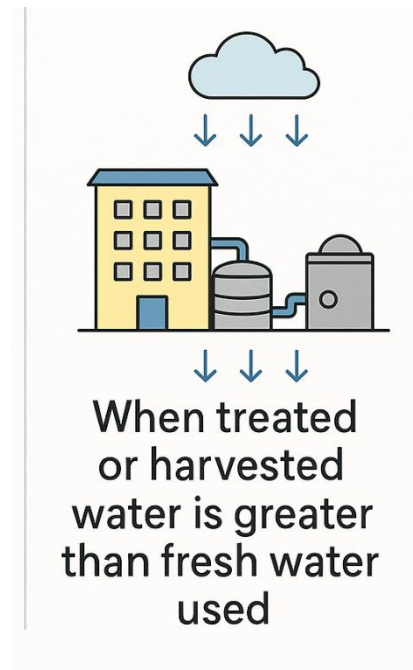
Natural Water Positivity

When Nature Restores
more
than Humans Take
(E.g North East India)



Institutional Water Positivity

When Human Systems
Restore
More
than Humans Take



A Water Positive School gives back more usable water to the school/institution than the fresh water it consumes for its daily operations.

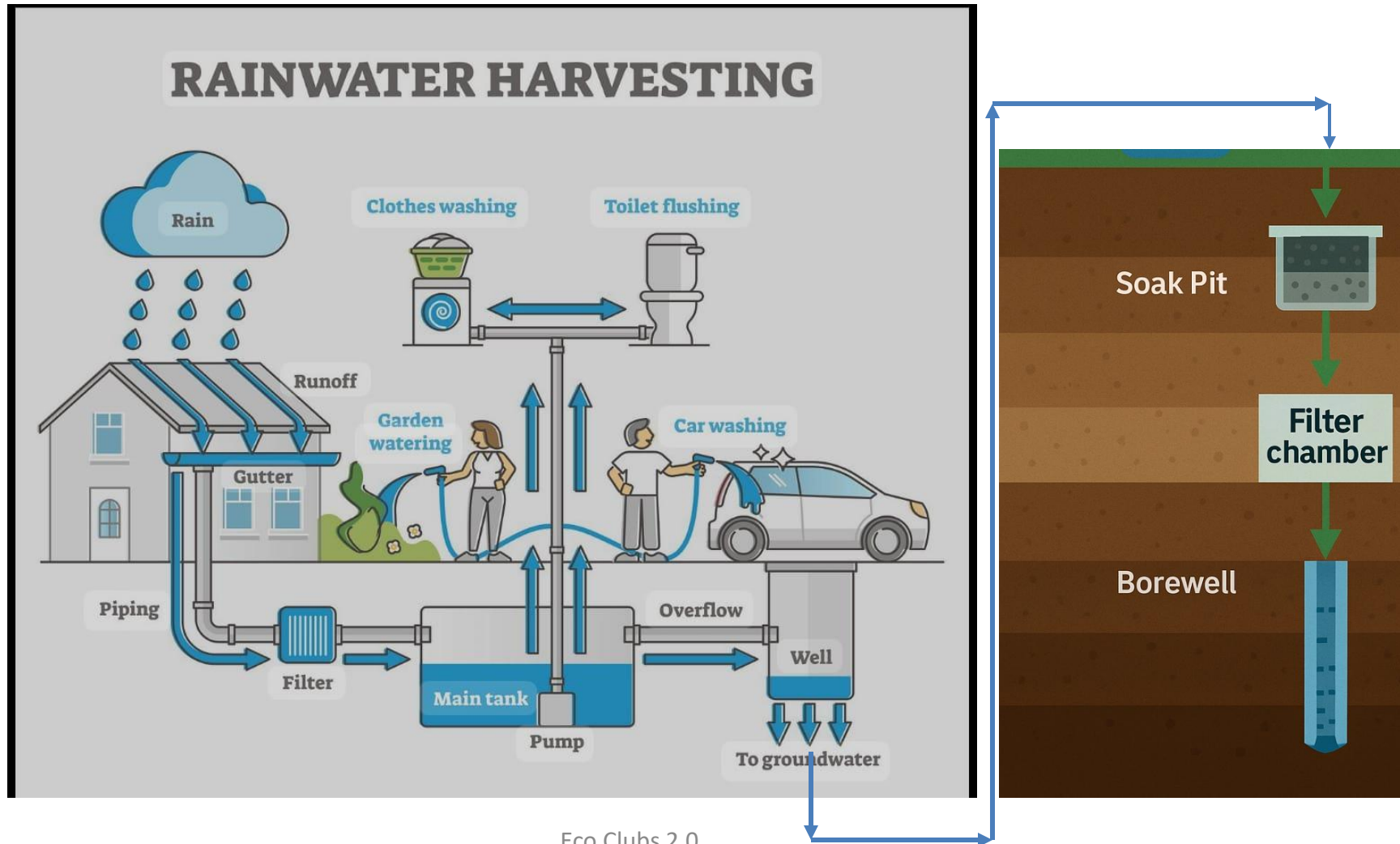
**Rain Water Harvested +
Treated & Reused Water +
Groundwater Recharge
>
Total Fresh Water Consumed**

Less reliance on Municipal Fresh Water!

Water Management: India: Rooftop Rain Water Harvesting

Rainwater from Rooftop, open areas, collected, stored in tanks for :

- immediate use as well as
- long term groundwater recharge





Rooftop Rainwater Harvesting Potential:
Rooftop area + Paved Area + Unpaved Area = 29,326 KL

Can provide:

- **Toilet water: 11,108 students per annum**
or
- **Water garden area of size: 16,069 m² per annum**
or
- **Water 4888 trees**

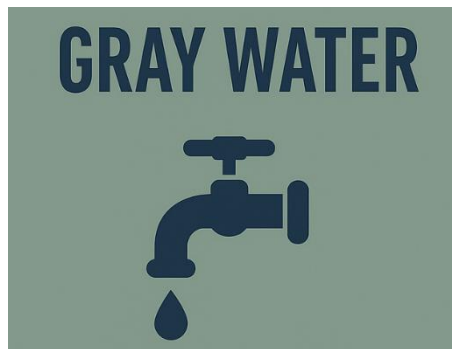


Black Water:

Water that contains faecal or sewage contamination.

Typically processed through Sewage Treatment Plants (STPs).

About 30-35% of water in a household is Black Water.



Gray Water:

Water, which is relatively clean, from bathing, hand wash, laundry, kitchen wash. Typically processes through Gray Water Treatment Plants.

About 65% of water in a household is Gray Water.

Water Management: Jesuit Schools – Water Sources, Uses

Where does water come from and where does it go ?



**Municipal
Potable Water**

**Drinking, Cooking,
Cleaning, Gardening**



Borewell
*(Soft/Hard Water
based on depth)*

**Gardening
Cleaning
Toilet Flushing**



Surface Well
*Moderately Hard
Water*

**Gardening
Cleaning
Toilet Flushing**



**Tanker
Potable Water**

**Drinking, Cooking,
Cleaning, Gardening**

Goal: Becoming Water Positive



1. PURPOSE

To ensure the school harvests, reuses and recharges more water than the fresh water it consumes



2. SCOPE: APPLICABLE TO

- Municipal, borewell, tanker, surface water
- Toilets, gardens, drinking, cleaning, canteen



3. DEFINITIONS & METRICS



Per Capita Water Use (L/person day)



% Rainwater Harvested



% Water Reused



Water Positivity Index



4. 3-YEAR GOALS

YEAR-1



- Water Audit and baseline per capita water use

YEAR-2



- 25% Rainwater harvesting, 10-20% reduction in per capita water use

YEAR-3



- 25-40% reuse+recharge

5. IMPLEMENTATION STRATEGY

INSTITUTIONAL



Low-flow fixtures

Install water-efficient taps, flushes and appliances.



Metering by zone

Track water use in all key areas.



Rainwater harvesting (RWH) structures

Capture and store rainwater for reuse and recharge.



Greywater reuse

Treat and reuse water from wash basins, AC condensate, etc.

5. IMPLEMENTATION STRATEGY

BEHAVIOURAL



Awareness, training, campaigns
Create awareness and run campaigns like "Measure what you treasure".



Student doing water audits
Engage students in monitoring and improving water use.



Review personal habits
Encourage everyone to reduce consumption and avoid wastage.



Recognition and Motivation
Celebrate efforts and reward water champions.

Water Quiz

www.menti.com

Type in 8 digit code

- Foundation
- Vision of a Sustainable School
- Water Positive
- **Carbon Neutral**
- Zero Waste to Dumpsite
- Biodiversity Enhancing
- Next Steps

VISION OF A SUSTAINABLE SCHOOL



WATER POSITIVE

- Harvests more water than it consumes



CARBON NEUTRAL

- Minimizes emissions and offsets the rest



ZERO WASTE TO LANDFILLS

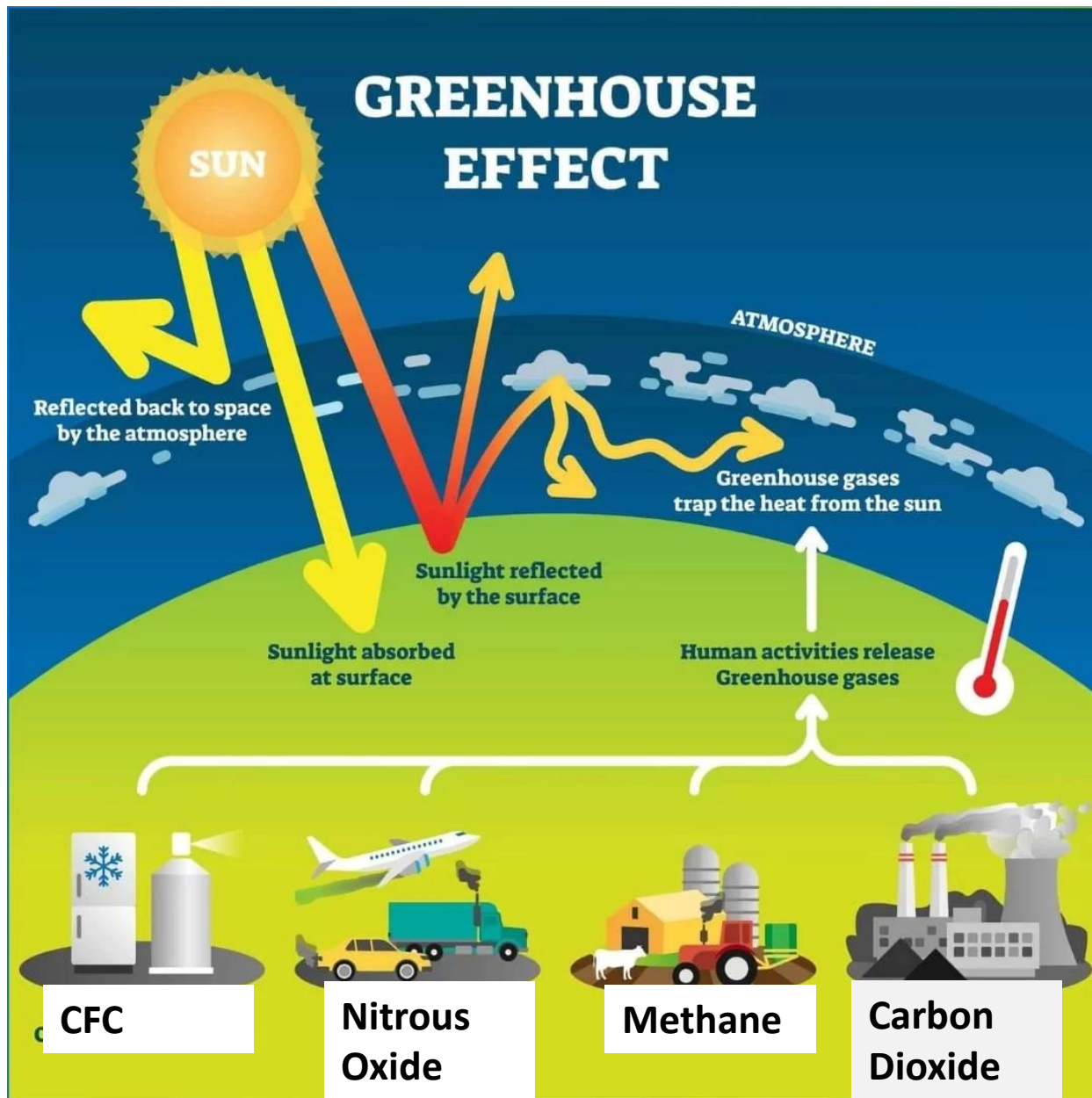
- Composts, recycles, and avoids sending waste to landfills



BIODIVERSITY ENHANCING

- Maintains gardens and habitats for birds & insects

Energy & Emissions: Green House Gases (GHG)

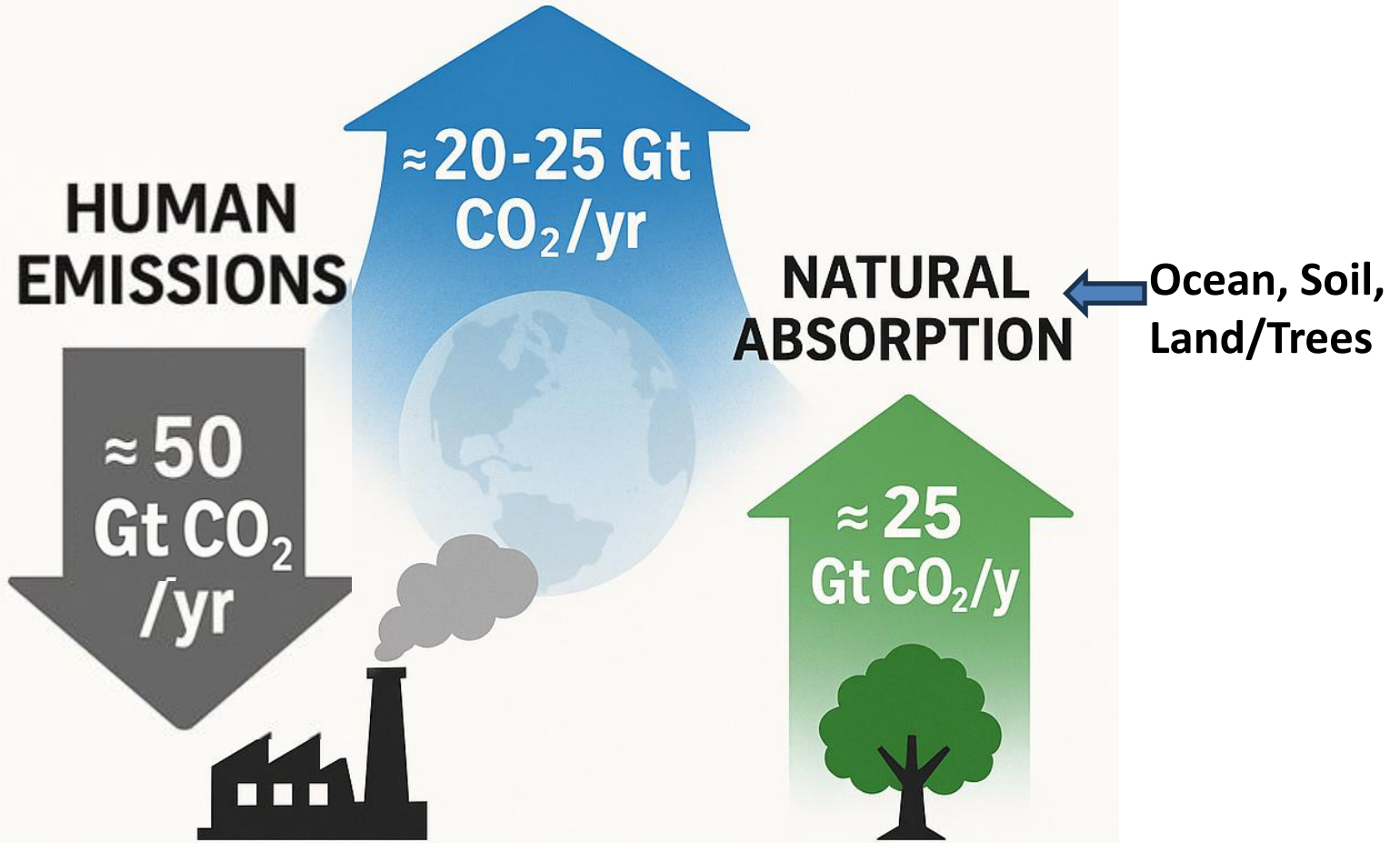


Climate Heating is caused when long term emissions

Exceed

Nature's absorption capacity

GLOBAL CARBON BALANCE (APPROXIMATE, PER YEAR)



Gt: Giga ton

CARBON NEUTRALITY = BALANCE

EMISSION



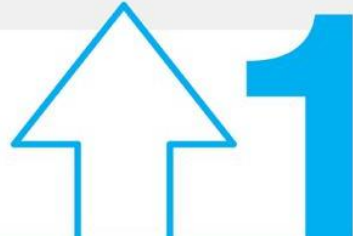
**Fossil Fuel, Industry,
Agriculture,
Transportation**

ABSORPTION



**Ocean, Soil,
Land/Trees**

Carbon Neutral – Three Scopes (Categories) of Carbon Emission



**DIRECT
EMISSIONS
OWNED BY
INSTITUTION**

**E.G Self owned
vehicles, DG Set,
Fire Extinguishers,
Refrigerants**



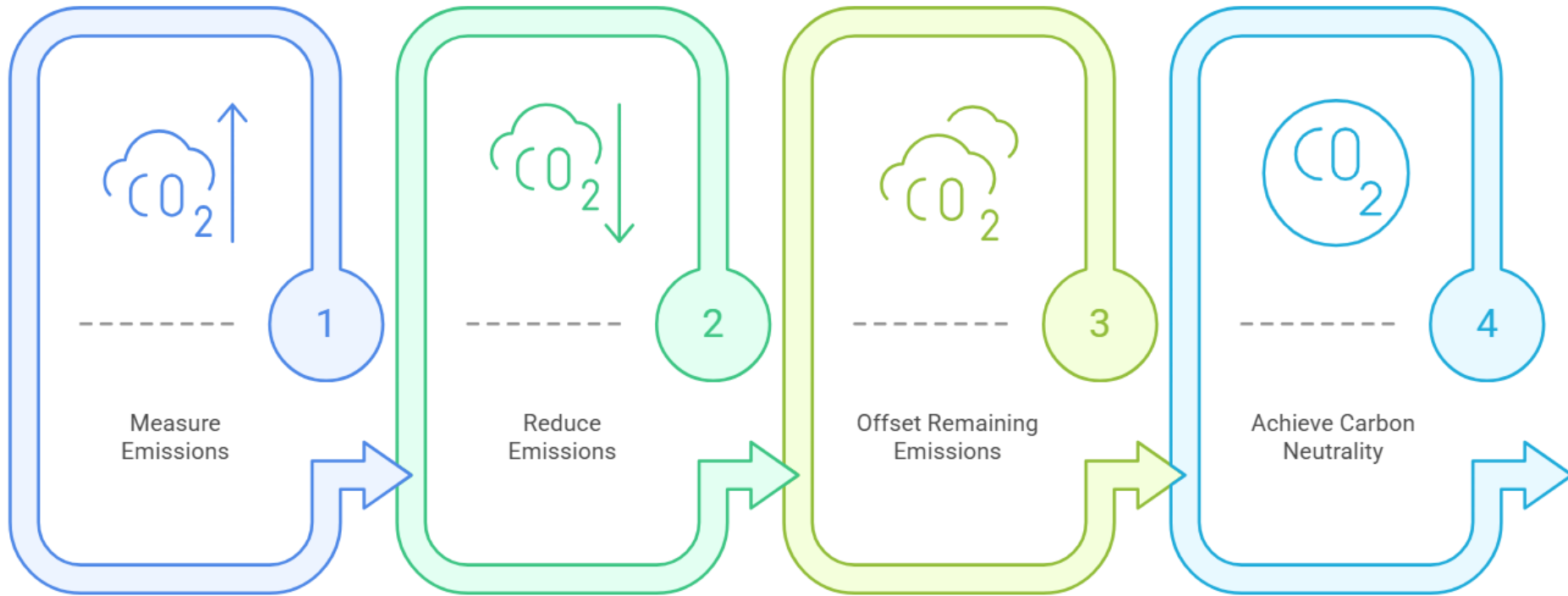
**INDIRECT EMISSIONS THAT ARE A
CONSEQUENCE OF AN INSTITUTIONS
ACTIVITIES BUT OCCUR FROM
SOURCES NOT OWNED OR
CONTROLLED BY IT**

**Emissions
caused (outside)
due to
purchased
Electricity**



**Emissions created
due to Institution
value chain like
Transportation of
students, staff,
goods, services**

Pathway to Carbon Neutral



**MEASURE
EMISSIONS**



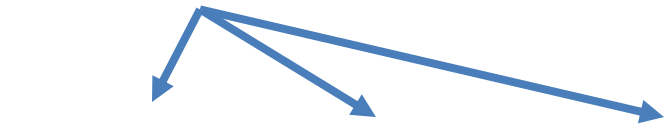
**REDUCE
EMISSIONS**



**OFFSET
REMAINING
EMISSIONS**



**ACHIEVE
NEUTRALITY**



$$(\text{SCOPE 1} + \text{SCOPE 2} + \text{SCOPE 3}) - \text{REDUCTIONS} - \text{OFFSETS} = 0$$

SCOPE 1, SCOPE 2, SCOPE 3 EMISSIONS FOR AN INDIAN SCHOOL

Scope 1 is almost negligible *except for Schools with own buses, DG or inhouse Bio Gas*

Scope 2: About 70-75% of Schools in West Zone have Solar. About 40% of those have Zero Bills

Scope 3: Maximum Effort needed to reduce Emissions due to Transportation

<https://www.ecosjwestzone.org/solar-dashboard/>

Province	Schools with Solar	Capacity kW	# Zero Bills
Bombay	15	860	6
Goa	7	218	7
Gujarat	12	415	NA
Pune	5	145	4
Total	39	1638	17

St Vincent's Solar Capacity: 100kW Rooftop



OUR GOAL

**Becoming Carbon Neutral
in Scope 1, 2, 3**



1. PURPOSE



To reduce GHG emissions through energy efficiency, renewable energy, and behaviour change progressing towards carbon neutrality.



2. SCOPE: APPLICABLE TO



- Routine consumption of electricity, fuel, DG sets as applicable



- Student, staff, and institution activities in school and mode of transportation to and from Institution



- Events



3. DEFINITIONS & METRICS



- Per Capita Energy (kWh/person/year)



- % Renewable Energy



- Estimated CO₂e emissions: Measuring Green House Gas (GHG) Emissions as per Scope 1, Scope 2, Scope 3 applicability

4. 3-YEAR GOALS (FOR A SCHOOL WITH MIXED USE OF RENEWABLE, FOSSIL)

YEAR 1



- **Baseline Audit + targeted 10-15% reduction in Per Capita Energy consumption (e.g energy efficient appliances, energy saving practices, better event management)**
- **Target 100% Renewable supply**

YEAR 2



- **Measuring Scope-1, Scope-2, Scope-3 Emissions (as applicable)**

YEAR 3



- **Target Reductions in Scope-1, Scope-3 (as applicable)**



- **Offsets Plan: Identify amount of offset and implement as per available Regulations**



- **Publish Carbon Neutral Report and address shortfalls.**

5. IMPLEMENTATION STRATEGY



INSTITUTIONAL



- Plan necessary changes for efficient electrical devices (lights, fans, pumps, lifts, refrigerators and accessories)



- Time of Day (TOD) tariff optimization: Rules of TOD are specified and applicable to schools



- Track energy usage during Events



- Track Transportation logs



- Streamlined maintenance of equipment



BEHAVIOURAL



- Switch off discipline to continue as part of routine habit



- Training, Awareness, Advocacy



- Recognition and Motivation

Carbon Neutrality is not the end of a journey — it is the beginning of living rightly with our Common Home.

Energy Quiz

www.menti.com

Type in 8 digit code

- Foundation
- Vision of a Sustainable School
- Water Positive
- Carbon Neutral
- **Zero Waste to Dumpsite**
- Biodiversity Enhancing
- Next Steps

VISION OF A SUSTAINABLE SCHOOL



WATER POSITIVE

- Harvests more water than it consumes



CARBON NEUTRAL

- Minimizes emissions and offsets the rest



ZERO WASTE TO LANDFILLS

- Composts, recycles, and avoids sending waste to landfills



BIODIVERSITY ENHANCING

- Maintains gardens and habitats for birds & insects

Zero Waste: India: Municipal Dumpsite: What is the Impact?



Mumbai/Kanjurmarg: 250 Acre, Major Air Pollution, Fires



Ahmedabad/Pirana: 84 Acre, Air Pollution, Health impact

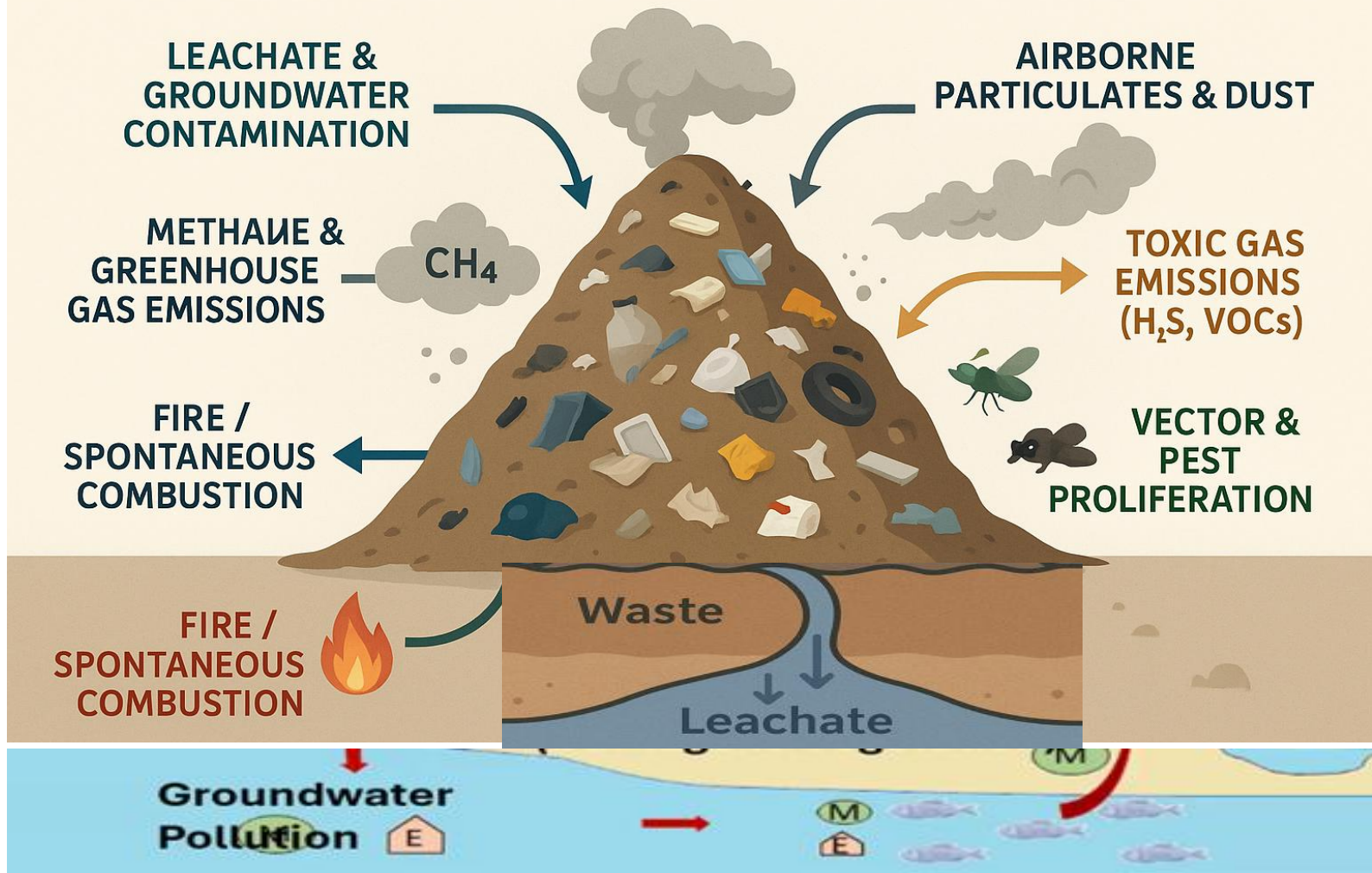


Pune/Uruli Devachi: 100 Acre, Leachate, Poor water quality



Belagavi/Turmuri: 85 Acre, Groundwater contamination

DUMPSITES: ENVIRONMENTAL & HEALTH HAZARDS



Wrong Place

Dumpsites

Litter on Streets

Mixed with Garbage

Domestic Waste

Roadside Dump

WASTE IS A RESOURCE IN THE WRONG PLACE



FOOD WASTE



COMPOST & BIOGAS



PLASTIC WASTE



RECYCLED PRODUCTS



GARDEN WASTE



MULCH & MANURE



E-WASTE



METALS RECOVERY



CONSTRUCTION DEBRIS



BUILDING MATERIAL

Right Place

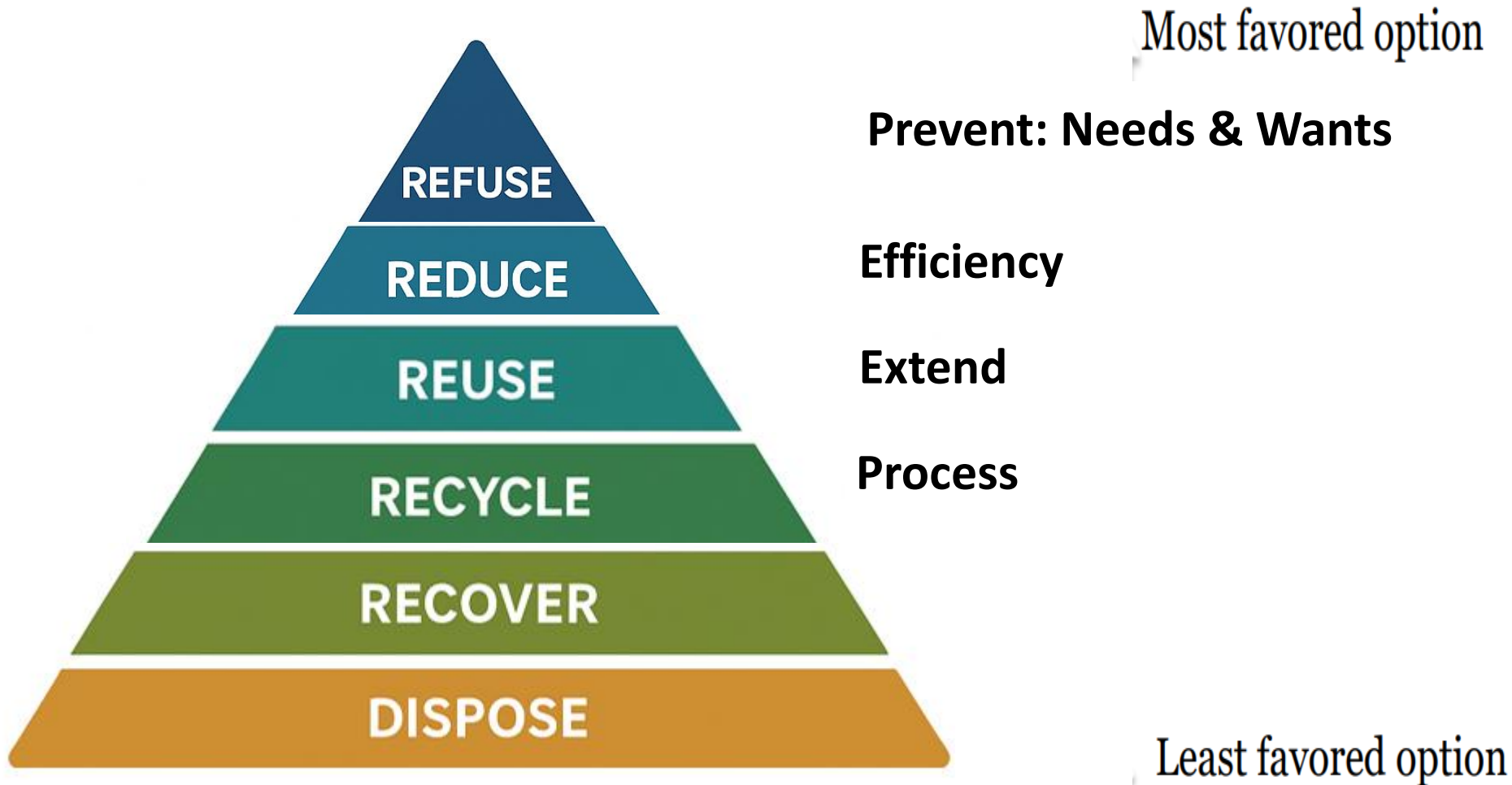
Compost

Recycle:
Benches, Tables

Mulch to retain moisture, Manure

Extract copper, gold, rare earth

Paver blocks, road sub base



This is not a Technical Hierarchy but a Mirror of the Choices we make as Individuals, Institutions

GOAL: ZERO WASTE TO DUMPSITE



1. PURPOSE

To eliminate waste sent to dumpsites to reduce methane emissions, prevent leachate pollution, reduce other waste sent to dumpsites and encourage responsible consumption.

This will be achieved through segregation, composting using the 3R's of Reduce, Reuse, Recycle.



2. SCOPE: APPLICABLE TO



- Types of waste generated: Wet, Dry, Bio Medical, E-Waste, Hazardous, construction & debris.
- Daily Waste + Event Waste (tracked separately)
- Waste generated in classrooms, labs, staff rooms, common areas, other school facilities
- All students, staff members, non-teaching staff, visitors using school premises.



3. DEFINITIONS & METRICS



- **Per Capita Waste (kg/person/day)**



- **% Segregation at source**



- **% Diversion from Dumpsite**



4. 3-YEAR GOALS

YEAR-1



- **100% Segregation**

YEAR-2



- **>50% diversion from dumpsite**

YEAR-3



- **>90% diversion from dumpsite**

5. IMPLEMENTATION STRATEGY



INSTITUTIONAL



**3-Bin System:
Wet, Dry,
Bio-Medical waste**



Composting



**Authorized
recyclers**



E-waste SOP



BEHAVIOURAL



**Student waste
monitors**



**Event waste
protocols**



Zero Waste Cities emerge when Citizens, Waste Workers, and Government share responsibility, not blame

Faster, Stronger, Higher..... Together!

Waste Quiz

www.menti.com

Type in 8 digit code

- Foundation
- Vision of a Sustainable School
- Water Positive
- Carbon Neutral
- Zero Waste to Dumpsite
- **Biodiversity Enhancing**
- Next Steps

VISION OF A SUSTAINABLE SCHOOL



WATER POSITIVE

- Harvests more water than it consumes



CARBON NEUTRAL

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ZERO WASTE TO LANDFILLS

- Composts, recycles, and avoids sending waste to landfills



BIODIVERSITY ENHANCING

- Maintains gardens and habitats for birds & insects

**India is losing
Biodiversity and
ecological
integrity.....even
where overall tree
cover may be stable
or increasing.....**





Conversion of Natural Ecosystems

Forests, wetlands, grasslands converted for agriculture, mining, infrastructure

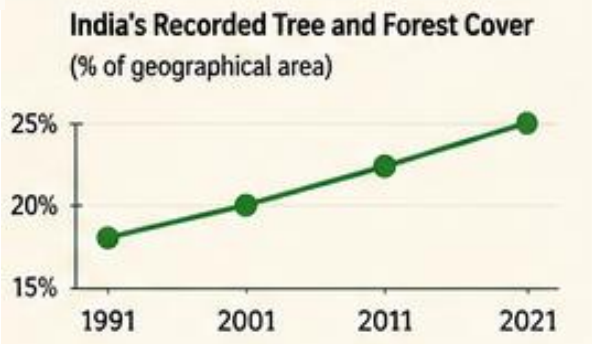


Habitat Degradation

Overuse, pollution, fires, unsustainable practices degrade forest covers



Misleading: Increasing Tree Cover



Ecological Integrity Declining

- Native habitats shrinking
- Species are at risk – local extinction
- Eco system services (clean water, pollination, climate regulation, soil health) are weakening

The future is not measured by just how many trees we plant, but by how many thriving ecosystems we leave behind

We cannot measure ecological success by counting trees alone; we must measure the life they support.

Trees & Greenery 2.0: Tree Planting, Eco Stewardship



Counts Trees Planted



Measures Eco system Health



One day event



Long Term commitment



Often uses any available species



Prioritises Native species, Local Ecosystems



Creates Green Cover



Restores Ecological Function



People Plant Trees for Nature



People become Caretakers for Nature

Goal: Biodiversity Enhancing Campus



1. PURPOSE



To move beyond tree count towards ecosystem health, native species and climate resilience.



2. SCOPE: APPLICABLE TO



TREES

Trees, shrubs, ground cover, soil, birds, insects
Campus + immediate neighbourhoods



3. DEFINITIONS & METRICS



Tree survival rate (3 year)



% Native species



Green cover ratio



Biodiversity indicators (birds/insects)



4. 3-YEAR GOALS

YEAR-1	An icon of a clipboard with a checklist and a magnifying glass, symbolizing an audit or inspection.	<ul style="list-style-type: none">• Tree inventory + health audit
YEAR-2	An icon of a single green leaf with a stem, representing nature or a specific species.	<ul style="list-style-type: none">• >70% Native species
YEAR-3	An icon of a landscape with green trees and a winding blue river, representing a biodiversity corridor.	<ul style="list-style-type: none">• Biodiversity corridors

5. IMPLEMENTATION STRATEGY



INSTITUTIONAL



Tree inventory and health audit
Map, tag and monitor all trees



Native and climate resilient species plantation



Improve soil health, add mulch and increase permeable green areas



Connect green spaces for movement of birds, insects and pollinators



BEHAVIOURAL



Awareness, training and campaigns to engage students



Students track trees, birds, insects and report observations



Review personal habits on saving water, avoiding harm



Celebrate champions and create a culture of care

Not just plant a tree — become a steward of shade, soil, and soul.

Every leaf counts when we measure what we treasure.

Trees2.0 Quiz

www.menti.com

Type in 8 digit code

- Foundation
- Vision of a Sustainable School
- Water Positive
- Carbon Neutral
- Zero Waste to Dumpsite
- Biodiversity Enhancing
- Three Year Roadmap
- **Next Steps**

Eco Clubs 2.0 – 3 Year Roadmap

Year	Focus	Key Output
Year-1	Foundation	Policies + Baselines + Dashboards
Year-2	Action	Measurable per capita improvements
Year-3	Leadership	Sustainable school role models

YEAR 1 FOUNDATION

Building the base today for a sustainable tomorrow



A. FOCUS



Policies



Baselines



Collaborative Platform



B. DELIVERABLES



4 Sustainability Policies



Baseline per capita metrics for all schools



Eco Ambassador to be integrated into Province schools



School level sustainability dashboard (V1)



First 6 monthly Province meet



C. METRICS



kWh/person/year



Liters/person/day



Kg waste/person/year,
% diversion from
dumpsite



Trees/person,
green cover/person



D. RECOGNITION



Provincial Award for Best Policy Implementation



Baseline Champion School based on Per Capita values

Principal

- **Policy ownership**
- **Vision, Goals, Targets**
- **Ensures accountability and integration into school culture**

Admin

- **Infrastructure**
- **Ensures Efficient Operation and timely maintenance**
- **Manages vendors, contracts, budgets**

Teacher's Role Critical

Eco Club

- **Awareness & Behaviour change**
- **Conducts audits and collects data**
- **Suggests improvement**

Alumni Eco Ambassador

- **Networking and partnerships**
- **Enhances visibility and sharing of best practices**



SCHOOL SHALL:

- Implement policy through SOPs
- Report on indicators monthly
- Maintain documented records (bills, logs, photographs, vendor invoices)

Eco Club Committee Shall Conduct



Operational Review: Monthly

Focus on data accuracy



Management Review: Quarterly

Focus on progress vs targets



Policy Review: Annually

Focus on strategy and goal adjustment



Participate in Annual Audits

Identify gaps and do necessary improvements



Policy Refresh: Every Three Years

New targets and benchmarks

From Good Intentions to Measurable Transformations

Thank You