Pollution & Solutions:
A Student Perspective on Türkiye

Understanding local environmental challenges, sharing real daily solutions, and building sustainable schools together.

Türkiye | Norway | Spain | Belgium

INTRODUCTION

1. What is Pollution & Why Should We Care?

DEFINITION

What is Pollution?

- **Basic Definition:** Harmful waste, gases, and chemicals entering nature faster than Earth can clean them.
- **Human Driven:** Mostly caused by energy generation, vehicle exhaust, single-use plastic, and heavy industry.
- **Why Teens Care:** It directly impacts our clean drinking water, clean air, future jobs, and public health.

CORE TYPES

The Three Major Forms

- **Air Quality:** Smog and microscopic particulate matter (PM2.5) that we breathe every day.
- **Water Bodies:** Litter, chemical runoff, and urban wastewater threatening marine species.
- **Soil & Landfills:** Unsorted trash and non-biodegradable plastics poisoning agricultural grounds.

OUR MISSION

The ActOver Goal

- **Act Before Game Is Over:** Our Erasmus+ mission is turning passive eco-anxiety into active youth work.
- **Simple Steps:** It starts with small, daily habit changes inside our classrooms and homes.
- **Four Nations:** Exchanging ideas between Turkey, Norway, Spain, and Belgium.

CHALLENGE 1 IN TÜRKIYE

2. Air Quality & Rush Hour Smog

SOURCES & IMPACT

What Causes Air Pollution in Türkiye?

- **Mega City Traffic:** Over 5 million motor vehicles on Istanbul roads alone, causing heavy exhaust fumes during morning rush hours.
- **Winter Heating:** Lower-grade coal and uninsulated buildings increase soot and PM10 levels in colder months.
- **Geographical Traps:** Hills and weather inversions in cities like Ankara, Bursa, and Istanbul trap stagnant smog close to the streets.
- **Student Reality:** Walking to school along busy highways exposes students to harmful fine particles.

ACTION POINTS

Realistic Everyday Solutions

- **Public Transit First:** Prioritizing Istanbulkart metro, tram (e.g., T5), and Marmaray over personal cars.
- **Active Commute:** Walking or cycling short neighborhood trips under 2 km instead of taking cars.
- **Smart Home Thermostats:** Lowering room heaters by just 1°C cuts household gas emissions by 6%.
- **Greener School Perimeters:** Planting dense hedge trees along school walls to naturally filter roadside dust.

CHALLENGE 2 IN TÜRKIYE

3. Plastic Seas & The Marmara Alert

THE SITUATION

The Water Pollution Crisis

- **The Mucilage Wake-Up Call:** The sea snot crisis in the Sea of Marmara showed how excess organic and industrial waste suffocates marine life.
- **Single-Use Plastics:** Thousands of plastic bottles, food wrappers, and cigarette butts end up on Bosphorus shores every week.
- **Microplastics in Seafood:** Plastics break down into invisible particles swallowed by fish, entering our dinner tables.
- **Drying Water Basins:** Lake Tuz and regional dams face shrinking water levels due to drought and waste.

YOUTH ACTIONS

How We Help Save Our Waters

- **Ditch Single-Use Plastic:** Carrying a reusable metal water bottle to school every day.
- **Coastal Clean-Up Days:** Student clubs organizing weekend trash pickup on local shores and riverbanks.
- **Proper Oil Disposal:** Never pouring used frying oil down the kitchen sink (1 liter of waste oil pollutes 1 million liters of clean water!).
- **Eco-Friendly Cleaners:** Using biodegradable soaps to avoid chemical fertilizer-like runoff in our seas.

CHALLENGE 3 IN TÜRKIYE

4. Solid Waste & The Zero Waste Movement

THE TRASH PROBLEM

The Waste Challenge in Numbers

- **33+ Million Tons:** Total municipal solid waste generated in Türkiye every single year.
- **Historically Low Recycling:** In the past, only around 13% of domestic waste was effectively recycled.
- **Landfill Overflow:** Giant trash hills produce harmful methane gas and require valuable land space.
- **Packaging Addiction:** Fast-food delivery culture creates mountainous single-use cardboard and plastic packaging.

SUCCESS STORY

Türkiye's Zero Waste Initiative (Sıfır Atık)

- **National Movement:** Türkiye introduced the 'Zero Waste Project' which inspired the UN International Day of Zero Waste (March 30).
- **Target:** Raising national recycling recovery to 35% in 2024 and over 60% by 2035.
- **Colored Bins in Classrooms:** Dedicated bins for Paper (Blue), Plastic (Yellow), Glass (Green), and Organic (Brown).
- **Cloth Bag Revolution:** Paid plastic grocery bags drastically reduced consumer bag consumption nationwide.

CLEAN FUTURE

5. Renewable Energy: Sun, Wind & Geothermal

SOLAR POTENTIAL

Solar Power ☀

- **High Sun Hours:** Central Anatolia and Aegean regions receive exceptional solar radiation all year.
- **Karasupınar & Rooftops:** Massive solar farms and expanding school rooftop solar panel setups.
- **Cost Effective:** Solar is now cheaper than fossil fuel generation.

WIND POWER

Wind Turbines

- **Windy Corridors:** Izmir, Balıkesir, and Çanakkale host world-class onshore wind farms.
- **Over 12,000 MW:** Wind already produces a significant share of our daily electrical grid.
- **Zero Carbon:** Clean power without pumping greenhouse gases into our atmosphere.

STUDENT ROLE

Youth Energy Role ⚡

- **Unplug Vampire Power:** Turn off chargers and monitors when not actively in use.
- **Natural Light:** Keep classroom blinds open during daytime classes instead of lamps.
- **Eco-Audit:** School teams tracking monthly school electricity meters.

CIRCULAR LIVING

6. The 5 R's: A Student's Daily Handbook

1. REFUSE — Say no to extra plastic straws, plastic bags, flyers, and disposable utensils at the canteen.

2. REDUCE — Buy only what you actually eat; choose clothes and school gear designed to last for years.

3. REUSE — Use refillable water bottles, lunch boxes, and scrap paper for rough math calculations.

4. REPURPOSE — Turn old shoeboxes into organizers, glass jam jars into pen holders, and scrap fabric into bags.

5. RECYCLE — Sort clean paper, aluminum cans, and clean plastic bottles into the correct colored bins.

OUR LIVING SYMBOL

7. The Erasmus Tree & Schoolyard Green Spaces

ECOLOGICAL ROLE

Why Trees in Schoolyards Matter

- **Natural Air Filters:** A single mature tree absorbs up to 22 kg of carbon dioxide every year and catches fine dust.
- **Cooling Classrooms:** Tree shade noticeably lowers urban temperatures around asphalt school playgrounds.
- **Urban Biodiversity:** Provides vital nesting space for birds, pollinators, and helpful insects in our cities.
- **Wellbeing & Focus:** Looking at natural greenery between intensive classes reduces student stress and fatigue.

OUR SCHOOL PLEDGE

Our ActOver Erasmus Tree Commitment

- **Planting Together:** Planting our native sapling with visiting international project teams.
- **Student Care Teams:** Assigning class rosters for weekly watering and compost soil replenishment.
- **Photo Documentation:** Taking seasonal photos to record our tree's growth across the project timeline.
- **Symbol of Unity:** A living connection linking schools in Türkiye, Norway, Spain, and Belgium.

ACTION CHECKLIST

8. Student Eco-Habits: What to Do & Avoid

NEGATIVE HABITS

✗ What We Avoid Doing

- **Single-Use Bottles:** Buying disposable water bottles every day at school.
- **Food Waste:** Leaving half an uneaten meal on cafeteria trays to rot in landfills.
- **Idle Devices:** Leaving classroom smart boards, PCs, and lights on during break times.
- **Littering:** Throwing snack wrappers on the floor or near school gates.
- **Fast Fashion Churn:** Buying low-quality cheap shirts worn only twice before throwing out.

POSITIVE HABITS

✓ What We Practice Daily

- **Refill Bottle & Lunchbox:** Bring personal canteen containers from home.
- **Sort At The Source:** Put clean plastics, cans, and papers strictly in designated recycling bins.
- **Power Off Habit:** Appoint a classroom energy monitor student each week.
- **Spread the Word:** Record a student podcast or share eco-facts with younger grades.
- **Clothes Swap & Repair:** Mend minor tears instead of instantly buying replacements.

ACT BEFORE THE GAME IS OVER

9. The Youth Eco-Advocate Pledge

✓ 1. Calculate: Measure our own carbon footprint via the WWF calculator and track improvements.

✓ 2. Reduce Waste: Support Türkiye's Zero Waste movement inside our classrooms and homes.

✓ 3. Protect Nature: Care for our school's Erasmus Tree and local urban green corridors.

✓ 4. Voice Out: Create podcasts, posters, and exhibits for our final ActOver Exhibition.

Thank You! • Questions & Discussion
ActOver Erasmus+ Partnership: Türkiye TR Norway NO Spain ES Belgium BE