UNESCO
United Nations Educational, Scientific and Cultural Organization
UNESCO Club VIENNA

BALANCING HUMAN NEEDS WITH THE FUTURE OF OUR PLANET

The United Nations World Water Development Report 2018: Nature-Based Solutions for Water: The report illustrates that working with nature, rather than against it, would enhance natural capital and support a resource-efficient and competitive circular economy. Nature-based Solutions (NBS) can be cost-effective, and simultaneously provide environmental, social and economic benefits. These interwoven benefits, which are the essence of sustainable development, are central to achieving Agenda 2030.
Nature-based solutions (NBS) are inspired and supported by nature and use, or mimic, natural processes to contribute to the improved management of water. There are several different types of NBS for water, ranging in scale from the micro/personal (e.g. a dry toilet) to landscape-level applications that include conservation agriculture. There are NBS that are appropriate for urban settings (e.g. green walls, roof gardens and vegetated infiltration or drainage basins) as well as for rural environments which often make up the majority of a river basin's area.

2018 Industrial Development Report (IDR) on Demand for Manufacturing: Driving Inclusive and Sustainable Industrial Development: The report presents new evidence on the relative roles played by domestic and global sources of demand in driving industrialization
A key message of the report is that the development of green industries requires major shifts in consumption patterns towards the purchase of environmental goods. Important barriers to the widespread consumption of environmental goods produced by green industries need to be removed. These include too high prices, gaps in consumer awareness of environmental concerns and biases in purchasing behaviour.
View the video on **Inclusive & Sustainable Industrial Development (ISID)** produced by UNIDO (6:36m)

2018 **World Environment Day** & **World Oceans Day** **Beat Plastic Pollution**: if you can't reuse it – refuse it. Plastic accounts for around 90% of all ocean trash with 46,000 pieces of plastic covering every square mile**.** **View the video** **Plastic Pollution: How Humans are turning the World into Plastic.**

ARE YOU READY FOR A BREAK UP? Click here

“Water IS Life” by Zhao Yusheng
Commissioned by
the UNESCO Club Vienna
to commemorate

International Decade Water for Life
UNESCO - IHE anniversary
50 years of Wise Water

Good quality water is essential to sustain human health and well-being, livelihoods and a healthy environment

Sustainable Development Goal 6

Target 6.1: Achieve universal and equitable access to safe and affordable drinking water for all.

Target 6.3: Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

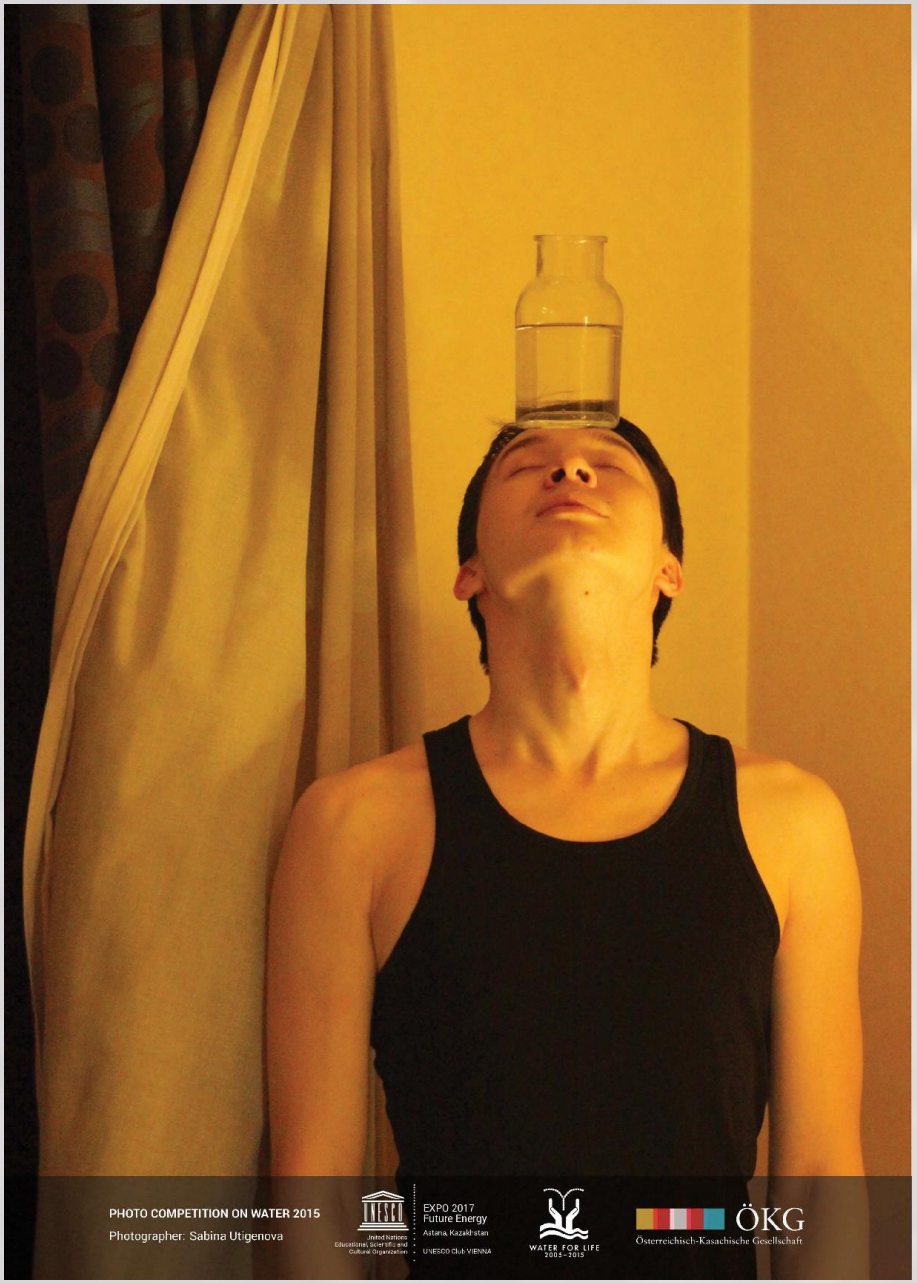
Under the surface – the global politics of ocean plastic pollution

Prior to the Blue Planet effect, the plastics industry was been involved in intense lobbying against any mandatory policies and targets to reduce plastic waste and bans on certain types of plastic, which has been well documented here and here.

As this excellent research from CIEL shows, fossil fuels are driving plastics production. **Over 99% of plastics are produced from chemicals sourced from fossil fuels** and plastic consumption is important for the fossil fuel industry: if current trends were to continue, the consumption of oil by the entire plastics sector will account for 20% of the total consumption by 2050. Fossil fuel subsidies also play a role as these incentivise the plastic market, allowing the cost of production to be less than production of an alternative.

Many governments in the global South have already taken strong policy initiatives, like bans or levies on single-use plastics, as the recent UN's "Single-Use Plastics: A Roadmap for Sustainability" report highlights the fact that **African countries are leading the way in the introduction and implementation of policies on plastic bags.** In this Nature article, Harini Nagendra argues that the global south is rich in sustainability solutions, and this includes solutions to address plastics pollution. Our own research on community-based recycling and waste management in Pakistan's informal settlements demonstrates this, too. There is increasing evidence that existing biodegradable alternatives are not an environmentally helpful substitution as this research published by the Royal Society Open Science shows. Interestingly, **the solution to alternative and sustainable packaging could possibly come from the oceans and the global South**. Seaweed is emerging as a promising new resource for biodegradable bio-plastics, it is an abundant and versatile material and there is no major conflict with other uses, such as no food security conflicts compared with other alternatives made from food crops such as corn. The Jakarta-based company Evoware is developing alternative packaging solutions from seaweed and this new emerging industry could provide many new economic opportunities for South East Asian countries.

The Institute of Development Studies (IDS) Patrick Schröder , Green Transformations



CREATIVE & INNOVATIVE thinking

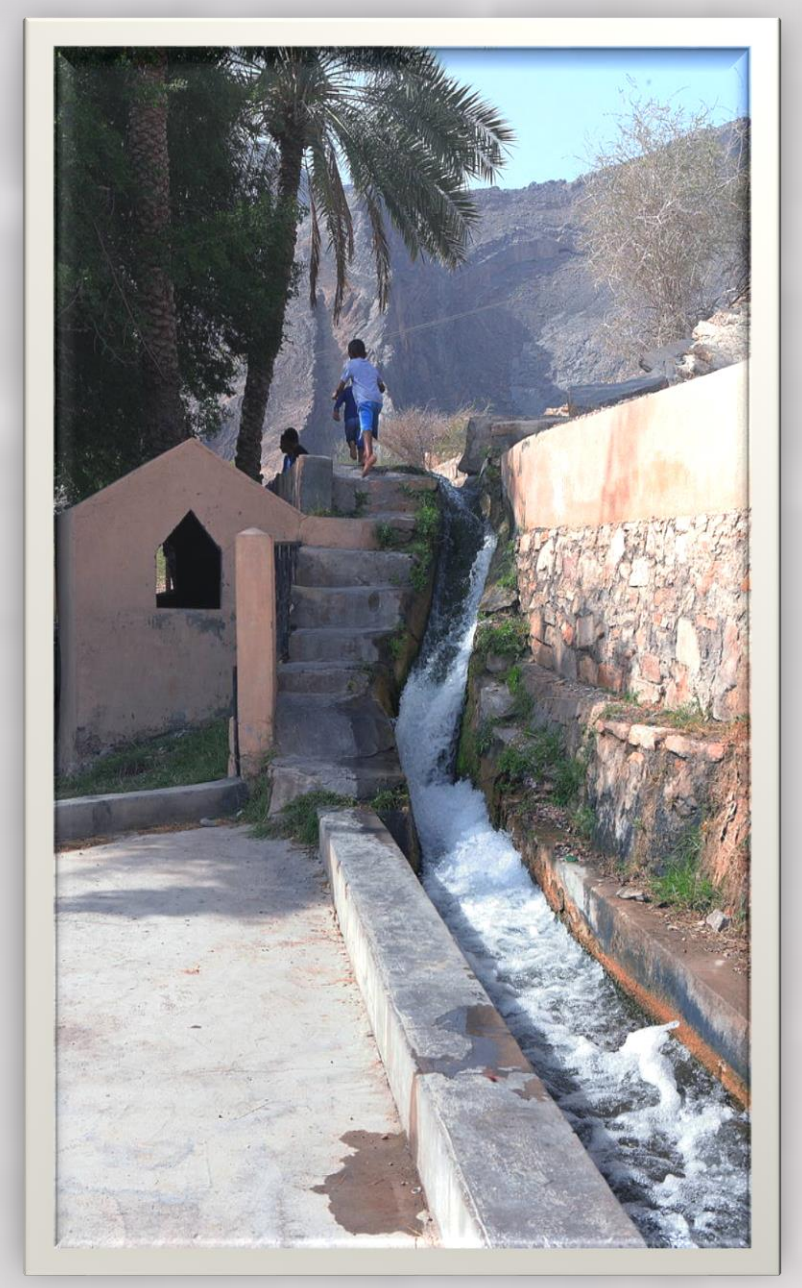
We need new solutions to managing water resources to offset the rising challenges to water security from population growth and climate change.
Audrey Azoulay, Director-General of UNESCO

MAIN WATER MANAGEMENT OBJECTIVES

- enhancing water availability
- improving water quality
- reducing water-related risks

ENABLING ENVIRONMENT FOR CHANGE

- suitable legal and regulatory frameworks
- appropriate financing mechanisms
- social acceptance.



Threatened by the lowering level of the underground water table the aflaj represent an exceptionally well-preserved form of land use

The aflaj irrigation system (Oman) a UNESCO World Heritage site includes five aflaj irrigation systems and represents some 3,000 such systems still in use in Oman.

The origins of this system of irrigation may date back to 500 A.D., but archaeological evidence suggests that irrigation systems existed in this extremely arid area as early as 2,500 B.C. Aflaj, is the plural of falaj which, in classical Arabic means to divide into shares and equitable sharing of scarce resources to ensure sustainability remains the hallmark of this irrigation system. Using gravity, water is channelled from underground sources or springs to support agriculture and domestic use, often over many kilometres.

The fair and effective management and sharing of water in villages and towns is still underpinned by mutual dependence and communal values and guided by astronomical observations. Numerous watchtowers built to defend the water systems form part of the listed property reflecting the historic dependence of communities on the aflaj system. Other buildings listed in association with the aflaj are mosques, houses, sundials, and water auction buildings.

Carmen Rocio Peña de Klein

Three years into the 2030 Agenda for Sustainable Development, it is time for us to re-examine nature-based solutions (NBS) to help achieve water management objectives.

Gilbert F. Houngbo, Chair of UN-Water
President, International Fund for Agricultural Development

Local and Indigenous Knowledge Systems

LINKS is a UNESCO interdisciplinary initiative that works to secure an active and equitable role for local communities in resource management

- **strengthens knowledge transmission across and within generations**
- **explores pathways to balance community-based knowledge with global knowledge in formal and non-formal education.**

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International MENA MUN 2018

Sousse, Tunisia 21-25 July 2018

SIDE EXHIBIT

BALANCING HUMAN NEEDS WITH THE FUTURE OF OUR PLANET

If current trends continue, the global per capita use of natural resources will increase by 70 per cent by the year 2050.

United Nations Environment Programme

WHERE FACTS AND FIGURES LOSE INFLUENCE

ARTWORK CAN STILL LEAVE AN IMPACT

2030 Agenda and the **SUSTAINABLE DEVELOPMENT GOALS**

To celebrate World Environment Day 2018

UN Environment organized 12 art installations around Asia and the Pacific under the theme of #BeatPlasticPollution.

The goal was to ask questions of passers-by in the hope they may contribute to a solution.

Reusing **W**aste **P**lastic

in Beijing

artists constructed

giant scrolls onto which

traditional **Chinese sayings about nature**

were projected

(UN Environment)

More than 8 MILLION TONNES of plastic waste enter our oceans EVERY YEAR

ONE MILLION plastic bottles are bought EVERY MINUTE

ONE HUNDRED THOUSAND
100,000

marine animals are KILLED

by plastic

ANNUALLY

A plastic installation in Yangon's Junction City Mall

(UN Environment)

Research from the Pacific Institute states that EACH DAY more than two million tons of sewage is dumped into the world's water. In addition to posing health risks to humans water pollution has severe long-term consequences for the environment's many ecosystems.

Artists create garbage-filled popsicles from water samples taken from 100 locations across Taiwan.

The samples were frozen as popsicles and encased in polyester resin to preserve them.

The finished product called POLLUTED WATER POPSICLES shows popsicles loaded with plastic, sewage, bottle caps, and other assorted forms of human waste.

Hung I-chen, Guo Yi-hui, Cheng Yu-ti
National Taiwan University of Arts in Taipei

THE SEVENTH RESOURCE

We all know the six major natural resources on the planet: water, air, coal, oil, natural gas and minerals.

Now, recyclables have joined them, as the world's Seventh Resource.

Founded in 1948, the Bureau of International Recycling (BIR) was the first federation to support the interests of the recycling industry on an international scale.

BIR founded Global Recycling Day in 2018.

THE MOST COMMONLY USED NON-FERROUS METALS

aluminium, copper, lead, zinc, nickel, titanium, cobalt, chromium and precious metals

Aluminium	> 33%	Copper	> 40%
Lead	> 35%	Zinc	> 30%

New metals made using recycled material (Source:BIR)

ART TECHNOLOGY & INNOVATION 3-D Metal*ART by* PAWLIX

Changing consumers' perceptions

Many consumers are still reluctant to buy certain items containing recycled materials.
However, goods manufactured with recycled materials have to meet the same quality standards as those produced using virgin materials.

Upcycled Metal*ART* Design *by* **PAWLIX**

Recycling aluminium requires 95% less energy
and produces 95% fewer greenhouse gas emissions (GHG)
than manufacturing primary aluminium.

Big Buddha ZOOM Paper on Aluminium

ART TECHNOLOGY & INNOVATION *by* CHRISTOPH BAND

BE INSPIRED

YOUNG CHAMPIONS OF THE EARTH YOUNG CHAMPIONS OF THE EARTH YOUNG CHAMPIONS OF THE EARTH YOUNG CHAMPIONS OF THE EARTH

Will you rise above the apps, snaps and tweets?

If you have a **big idea** to protect or restore the environment; if you have **a vision** for a more sustainable future; if you have **a strong track record of instigating change**; if you are **unafraid of failure**; and if you believe in a bright future for our planet, then you just might have what it takes to become a Young Champion of the Earth.

Launched in 2017, Young Champions of the Earth is **A GLOBAL INITIATIVE AIMING TO IDENTIFY, CELEBRATE AND SUPPORT TALENTED INDIVIDUALS BETWEEN THE AGES OF 18 AND 30 WITH OUTSTANDING POTENTIAL TO CREATE POSITIVE ENVIRONMENTAL IMPACT.** Managed by UN Environment in partnership with Covestro, Young Champions stems from the Champions of the Earth Award which remains the United Nations highest environmental honour.

MENA Regional Finalists 2018

They offer an impressive array of scalable, innovative and potentially impactful solutions to some of the world's most pressing environmental challenges. View the list of regional finalists.

Heba Al-Farra, Palestinian, The State of Kuwait

WEE: Women in Energy & Environment in the MENA Region

WEE is a forward-looking organization focusing on women in energy and environment in the Middle East & North Africa. WEE is a member-driven organization in which diversity, innovation and creativity are valued and our members are our key resources. WEE is dedicated to supporting women in their current roles and building a supportive community for them. Through WEE, I will seek to advance the role of women in the MENA region in leading the green industry while demonstrating the positive environmental, social and economic impacts of women. We will work to enhance the skills of our women members with a view to promoting gender balance across all levels of the industry. By providing women with consistently high quality services, creative solutions, technical skills and future opportunities, WEE will empower women to become leaders in their organizations.

Essam Al-Sharaby, Yemen

Organic Agriculture for Yemen

My big idea is to produce organic agricultural products as part of a broader sustainable development strategy. I will develop and implement a number of practical measures to promote environmentally friendly agricultural production that supports human health and conserves natural resources. Specifically, I will develop clean and safe agricultural inputs such as organic fertilizers and herbicides which can compete with and displace the toxic chemicals which are currently in use across Yemen. Simultaneously, I will engage farmers, land owners and other stakeholders to promote environmental awareness and responsibility. I hope that my project will avert further poisoning of the environment and harming of human health whilst generating economic opportunities.

Kristal Kurde, The Republic of Iraq
A Guide for an Ideal Nature

Humanity is in a critical situation. Our society is failing to recognize the indispensable role of nature in supporting our health and wellbeing. Nature underpins our civilization. Many developing countries are ravaged by war and conflict. They face huge challenges in meeting the immediate needs of soaring populations, including increasing numbers of displaced people. Rising demand is placing severe pressures on natural resources such as freshwater. These problems, exacerbated by climate change, have distracted people and their governments from the essential task of conserving nature. Through “A Guide for an Ideal Nature”, I intend to promote environmental awareness in my community and share tips and instructions for caring for the environment. Additionally, I will collaborate with women to conceptualize and implement a number of projects aimed at implementing the guide.

Shady Rabab, Egypt
Garbage Music

As a passionate musician, designer and environmental activist, my dream is to bring together children working as garbage collectors in Luxor and teach them how to make their own musical instruments from trash and play music as a band. The project will empower children through the innovative use of waste, whilst using art and music as a medium to nurture relationships between communities, families and children. Furthermore, the project will promote waste recycling in the design and implementation of development projects to effect positive change in communities. We will provide free weekly classes to a stigmatized group of 70 children in Luxor who currently work as waste collectors. On self-made instruments, they will play together as the “Garbage Conservatoire Band” at various events in Egypt and beyond. Music will transform their lives and allow them to express themselves while fostering a sense of solidarity and community.

Mohamad Safa, The Lebanese Republic
Waste sorting from the source and clean seas

The waste crisis is a serious threat to environmental, animal and human life around the world. Therefore, I have been working for five years on waste sorting from the source and implemented many campaigns to clean the seas and nature. The process of sorting waste from the source is the responsibility of the individual in the community. It is a sound start to solve the problem of waste accumulation in the environment and depends mainly on the consciousness of the emerging generations, especially schoolchildren. I propose integrated waste management as a means to delivering the social, economic and environmental dimensions of sustainable developments. Waste sorting is essential. Every country must embrace waste as a source of wealth. Remember “a healthy environment means healthy people”.

Karim Shrayedeh, The Hashemite Kingdom of Jordan
Protection of Water Dams in Jordan

The “Protection of Water Dams in Jordan” project aims to protect the environment by increasing vegetation coverage in the catchment areas of two dams that supply Amman (the capital of Jordan) and Al-Karak with water. Both the Wadi Almujab and Wadi Al-Karak dams are facing increased accumulation of sand and other sediments. This has diminished their storage capacities, threatening vital supplies of water to agriculture. Without the dam water, farmers will be forced to tap precious limited groundwater resources – an unsustainable scenario. This project will seek to raise the dams’ water levels through non-traditional methods. Jordanians and Syrian refugees will be employed for a total of 75,000 working days to increase vegetation coverage in the catchment areas. The project will thus create new job opportunities, enhance social inclusion and foster a sense of shared responsibility for the maintenance of the dams and their catchment areas. Moreover, it will improve the efficiency of the aforementioned dams.

YOUR WORLD
YOUR CHOICE

BE THE CHANGE

Fran E. Wright
UNESCO Club VIENNA

SAKR Mohamed
MENAMUN