EUROPEAN RIVER SYMPOSIUM 2021

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A Water Sector Transition to Save the Planet

Opening presentation by:

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The World Bank

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The World Bank has increased its commitment to support green development and climate action, consistent with the European Green Deal

The Green, Resilient, and Inclusive Development (GRID) Approach

Three Dimensions of GRID

GREEN

Invest in solutions that sustain natural capital, including climate, to ensure that today's decisions are resilient and do not undermine tomorrow's growth.

>>Driving transitions in three strategic systems:

- Food & land use system (agriculture, water & forests)
- Sustainable transport & urban infrastructure
- Energy system

RESILIENT

Invest in risk management to prevent and prepare for climate change, pandemics, natural hazards, socioeconomic and financial shocks.

>>Mainstreaming risk management principles in all sectors, including infrastructure, cities, social systems, service delivery, and macro stability:

- Risk identification
- Risk reduction
- Residual management
- Inclusion of vulnerable groups.

INCLUSIVE

Invest in human capital and foster policies for inclusive growth to create jobs and tackle exclusion and inequality.

>>Boosting human capital as a foundation for shared prosperity:

- Health, education, and housing
- Social protection
- Inclusion of women and marginalized groups
- Access to infrastructure, incl. water, sanitation, transport, power.

Cross-cutting enablers

- Investing in all forms of capital
- Macroeconomic & structural policies, institutional strengthening and technology innovation
- Mobilizing capital at scale, especially from the private sector

WBG capacity

>> Advisory services & analytics, and IFC advisory services
>> Investment lending (IPFs, DPLs), IFC loans & equity investments, and MIGA guarantees
>> Convening and coordinating international cooperation

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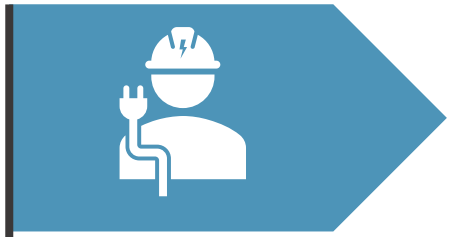
Climate Change Action Plan 2021-25

- Increase Climate Finance
- Improve and Expand Climate Diagnostics
- Focus on Climate Results and Impact
- Reduce Emissions and Climate Vulnerabilities in Key Systems
- Support a Just Transition out of Coal
- Align with the Paris Agreement

We have highlighted sectoral transformation pathways which will be critical to achieve climate and broader sustainability objectives



Energy

Energy accounts for around three-quarters of gross global greenhouse gas emissions, with coal combustion accounting for one-third. Achieving net zero emissions by mid-century is only possible with a rapid, unprecedented, shift of global energy systems from fossil fuels to renewable energy.

Agriculture, Food & Land Use

Agri-food system transformation is particularly urgent for both climate change and to feed a growing population. Agricultural and land use change accounts for almost 25 percent of GHG emissions.

Cities & Urban Infrastructure

Cities consume over two-thirds of the world's energy and account for more than 70 percent of global CO2 emissions. The transformation of cities and urban systems will be critical in achieving carbon neutrality—and in making cities and human settlements inclusive, safe, resilient and sustainable in line with SDG 11.

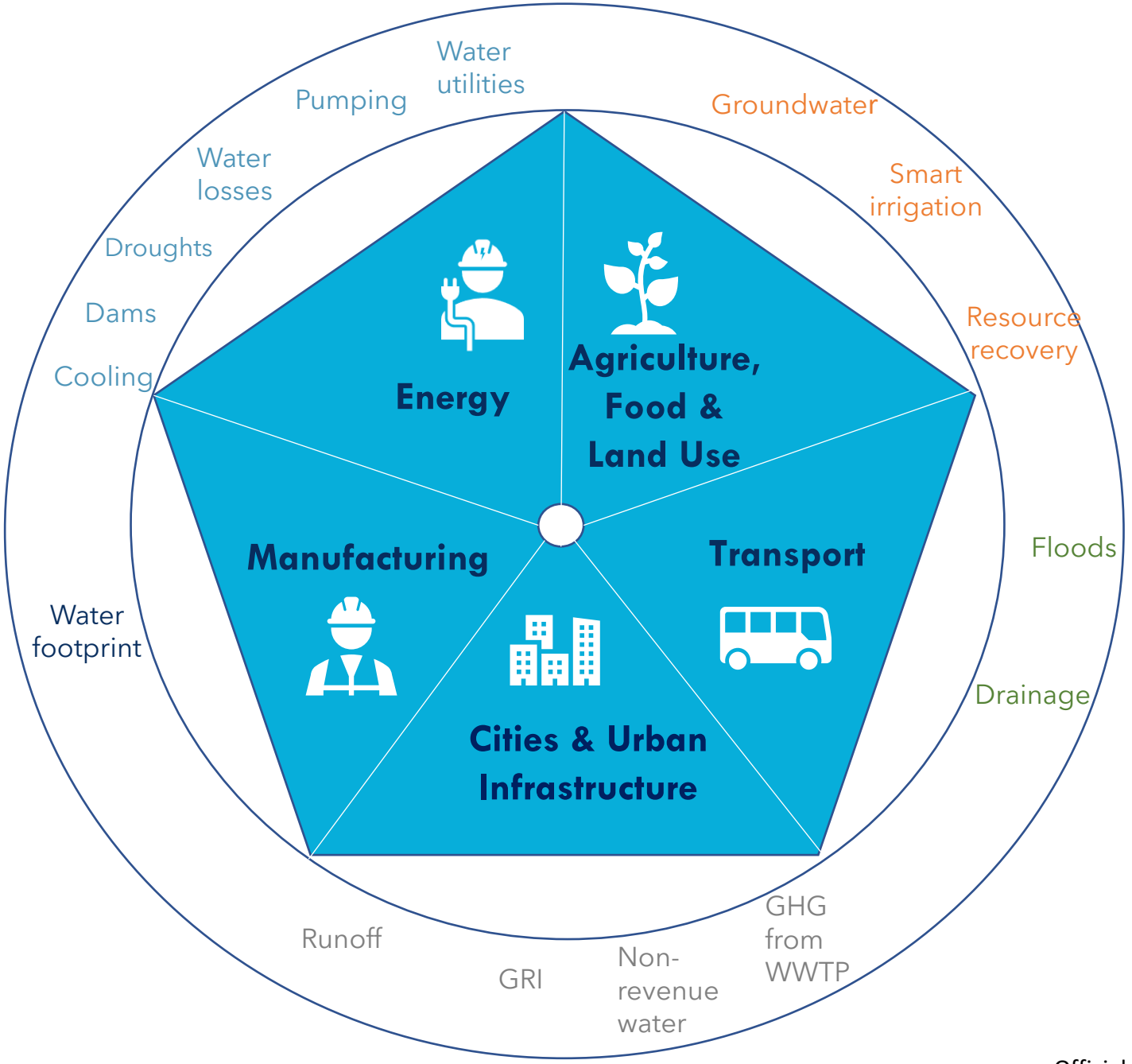
Transport

Transport emits around 24 percent of the energy-related carbon emissions that are associated with global warming and transport emissions have grown faster than other sectors over the past 50 years. Without aggressive measures, emissions from transport are expected to grow 60 percent by 2050.

Manufacturing

Manufacturing activities, especially the production of base materials such as chemicals, steel, and cement, contribute to about 27 percent of global GHG emissions. These sectors are building blocks that lay the foundation for a range of economic activities, create jobs along all value chains, and drive the economic growth of countries.

However, water is everywhere and nowhere in the climate discussion



Towards a water sector transformation for ECA

The future is *circular*

From:

To:

The future is *distributed*

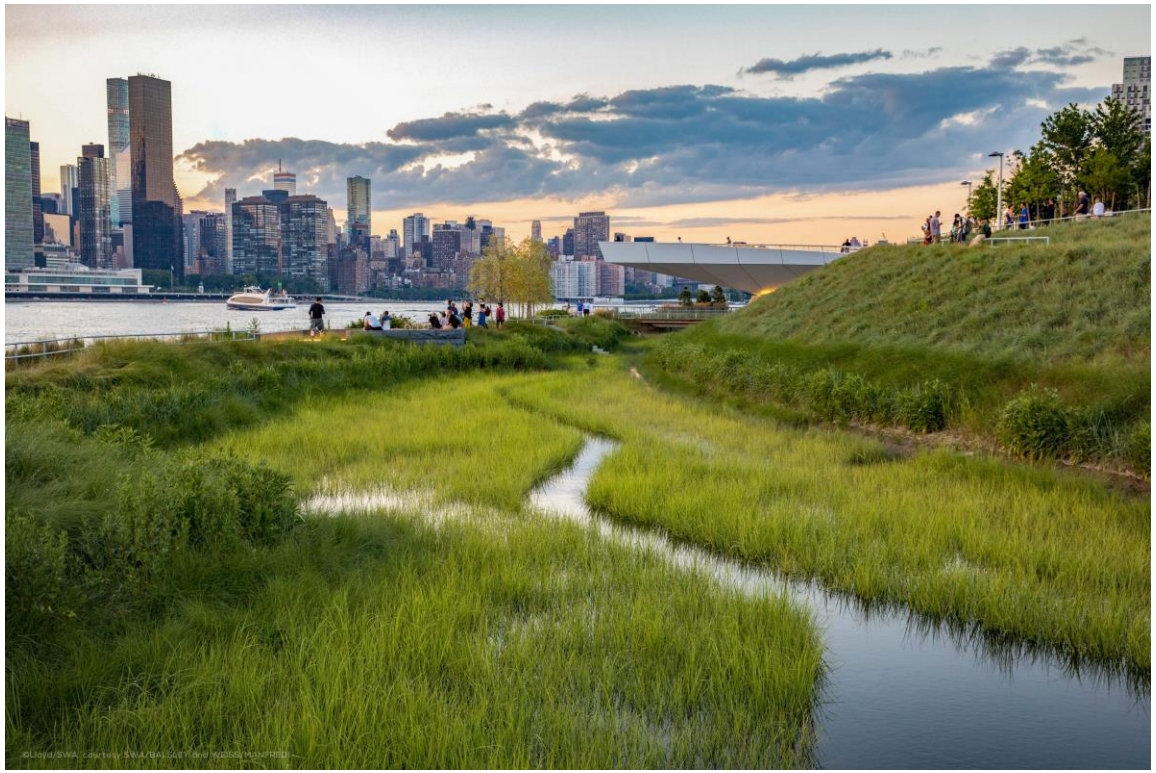
From:

To:

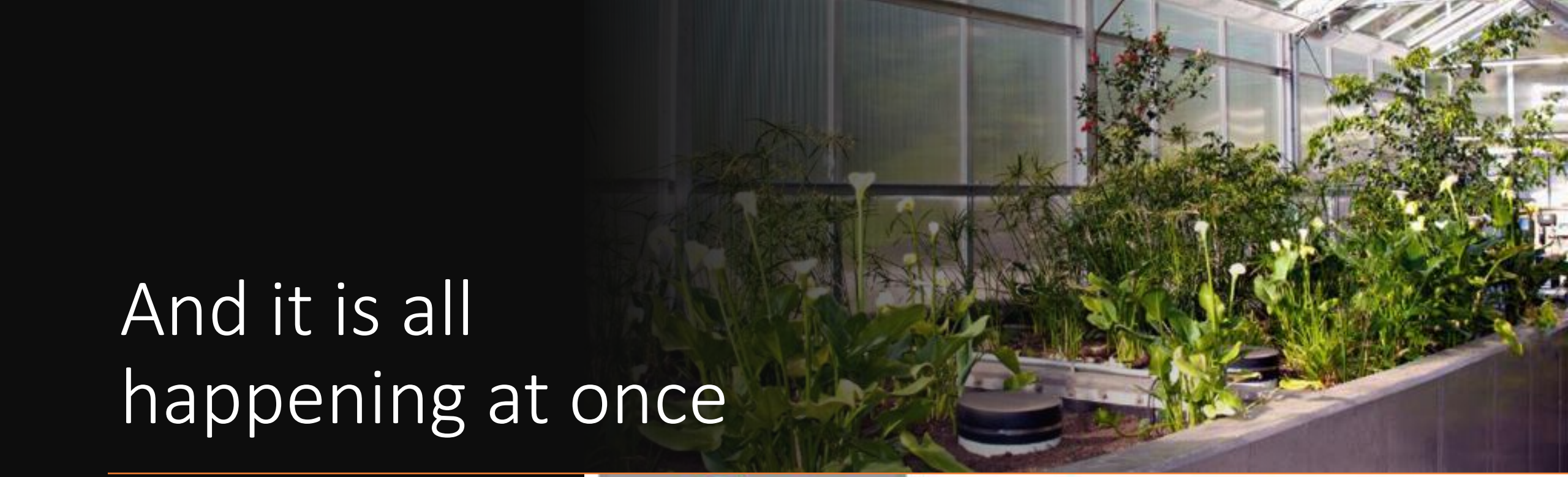
The future is *green*

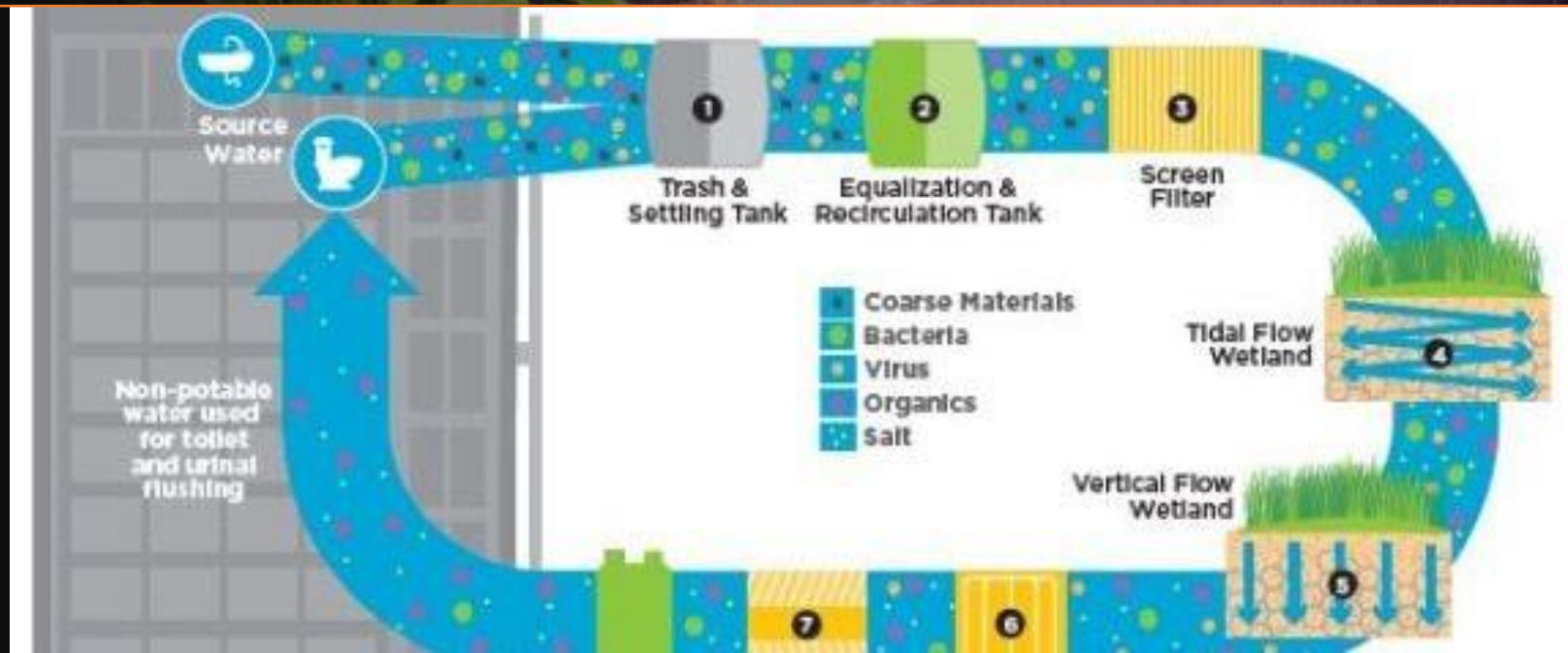
From:

To:



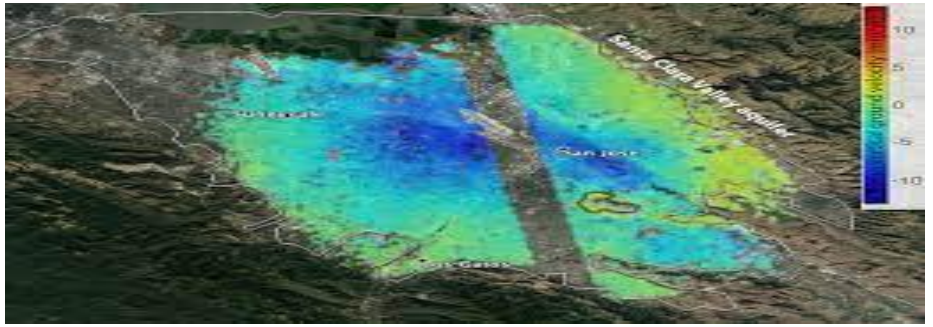
And it is all happening at once





And is being enabled by rapid technological innovations

- Remote sensing for resources (ability to monitor ground water as well as surface water)
- Micro sensors for water quality (facilitates recycling and just in time delivery for plants)
- Nanotechnology is reducing the energy intensity, built infrastructure and chemical requirements of water treatment
- Efficient solar pumps for irrigation (distributed energy needed for distributed water services)
- AI to better anticipate and manage demand for both humans and plants and eventually to better engage broader ecosystems



What kind of outcomes?

Lower energy requirements – carbon neutrality

Less pollution in water bodies – health risks

Reduced ecosystem disturbance - biodiversity

How the World Bank is putting this transition into practice:

- Marrakech groundwater-based water security
- Uganda farmer led irrigation
- China sponge cities initiative

Some frontier issues

- Mentality and skills shift in industry – from delivering a product to delivering a service.
- Investment budgets need to more explicitly emphasize that efficiency gains are IT, rather than mechanically, driven.
- “Stranded” assets – long term investments
- “Acceptance” from public – just as people like to hear their car engines, people like to see concrete.
- Just transitions and just outcomes – managing impacts on current workers and ensuring customers have equal access to quality water services.

Thank you