

Building toward

a **thriving future**  
of **opportunity**

## Reshaping our relationship with our world

The Julie Ann Wrigley Global Futures Laboratory™ is the transdisciplinary international headquarters of networks of scientists, scholars and innovators who are designing solutions for a future in which Earth can thrive.

The Global Futures Laboratory is home to solution-based innovations such as direct air carbon capture technology, globally deployable microgrids, circular economy incubation, portable self-contained educational libraries and more.



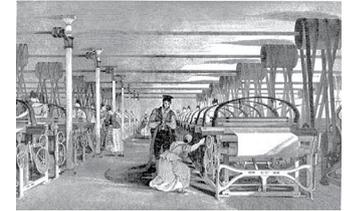
“Over centuries, humankind has asked our planet to give more than it has to offer and driven it toward its environmental and societal boundaries. To address this crisis under extreme time pressure, **we have to face the daunting task of mobilizing intellectual and material resources of proportions never seen before,** and we have to do it now.”

—Peter Schlosser

Vice President and Vice Provost of Global Futures

**The Industrial Revolution**, fueled by the game-changing use of steam power, begins.

*Illustration: T. Allom*



**Mount Tambora** in Indonesia erupts. One of the most powerful eruptions in recorded history, it causes a volcanic winter that leads to global cooling and crop issues across the Northern Hemisphere.

*Photo: NASA*



1856

American scientist **Eunice Newton Foote** documents the underlying cause of today's climate change crisis, the greenhouse effect.



Chemist **Svante Arrhenius** concludes that CO<sub>2</sub> warms the atmosphere, and that human-caused CO<sub>2</sub> emissions, such as fossil fuel burning and combustion, can cause global warming.  
*Photo: Journal of Physical Chemistry, Volume 69, 1909.*



1896

**World War II** destabilizes societies with grave consequences.



The United States celebrates the first **Earth Day**, which is now celebrated in 193 countries.



1970

Vision emerges for the **Center for Environmental Studies**, a multidisciplinary environmental research center that is the foundation for ASU's commitment to sustainability education and research.



ASU defines environmental research and collaboration in the region through the **Central Arizona-Phoenix Long-Term Ecological Research** project.



1971

1997

**Michael M. Crow** becomes ASU's 16<sup>th</sup> president, bringing with him a commitment for ASU to become a leader in sustainability.



ASU launches the **Biodesign Institute**



2002

2004

2004

ASU convenes a panel of globally renowned sustainability experts in **Temozon, Mexico** to help design a university-guided sustainability effort.



The **Global Institute of Sustainability** is launched as ASU's hub to advance interdisciplinary research on environmental well-being, economic prosperity and social justice.



2005

ASU's **Decision Theater** ushers in a new era of public policy decision-making.



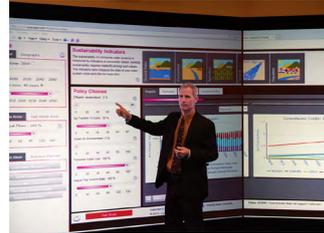
ASU launches the nation's first **School of Sustainability** to educate future generations of scholars and practitioners committed to developing solutions to the most pressing global issues.



2006

2007

Decision Center for a Desert City creates **WaterSim**, an interactive model to bridge the gaps between policymakers and scientists.



ASU's **Sustainability Solutions Summit** in Washington, D.C. draws national leaders.



2008

2009

**The Sustainability Consortium**, led by ASU, is founded to set consumer product standards and supply chain modeling.



ASU partners with the nation's fourth largest city to create **Energize Phoenix** to help the city save energy, create jobs and transform neighborhoods.



2010

2012

The **Rob and Melani Walton Sustainability Solutions Initiatives** are launched to facilitate ASU's goal to solve global challenges, educate future leaders and engage the public.



With 74 solar systems across its Tempe campus, ASU has the **largest solar energy capacity** of any university nationwide.



2013

ASU establishes the pioneering **School for the Future of Innovation in Society** to focus on joining the social and technical aspects of innovation.



196 parties adopt the **Paris Agreement**, an international climate treaty pledging to undertake actions that will limit global warming to 1.5–2 degrees Celsius compared to pre-industrial levels to reduce the worst risks of climate change.



2019

ASU realigns its sustainability and futures initiatives with the creation of the **Julie Ann Wrigley Global Futures Laboratory**.



ASU establishes the **Center for Global Discovery and Conservation Science**, focused on mitigating and adapting to global environmental change.



2020

ASU and the Global Futures Laboratory push the evolution of the study of planetary futures with the formation of the **College of Global Futures**, aligning the School of Sustainability and the School for the Future of Innovation with the newly established **School of Complex Adaptive Systems**, all dedicated to creating a thriving future for all.



ASU is recognized as the **top university in the U.S. for global impact** by Times Higher Education.



The **Bermuda Institute of Ocean Sciences** joins ASU, expanding the Global Futures Laboratory's capacity to explore the globe's oceans and their role in our planet's climate, food and biodiversity systems.



In partnership with Carbon Collect Ltd., the first **MechanicalTree™**, a pioneering carbon capture mechanism to help the planet meet the global warming temperature limits established by the Paris Accords, is fabricated. Installation on the ASU Tempe campus is completed in the spring of 2022.



The Global Futures Laboratory and the Earth League convene the inaugural **Global Futures Conference**, bringing together international leaders in business, industry, academia, activism and government to define the 10 essential transformations for a thriving future for humans and all of Earth's inhabitants.



ASU launches the **Arizona Water Innovation Initiative**, a multiyear effort led by the Global Futures Laboratory to protect a thriving water future for Arizona. The initiative utilizes community partnerships across multiple sectors to implement actionable, evidenced-based solutions.



The new headquarters for the Global Futures Laboratory — **Walton Center for Planetary Health** — opens, providing students, faculty, researchers and partners a collaborative space unlike any other that houses research labs for biological sciences, engineering, life sciences and sustainability.



The College of Global Futures announces the launch of its fourth school, the **School of Ocean Futures**, to advance healthy coastal communities and marine systems through knowledge development, partnerships and innovation.



Arizona State University is recognized by **Times Higher Education** as **#1 in the U.S.** and #6 in the world for driving impact in reaching the UN's Sustainable Development Goals, and is recognized by the AASHE STARS program as **#1 in the U.S.** and #2 in the world for sustainability practices.

**#1**

**global impact**

ASU ahead of Michigan State and Penn State

— Times Higher Education, 2020–2023

**sustainability**

ASU ahead of Stanford and Carnegie Mellon

— AASHE STARS, 2023

**innovation**

ASU ahead of MIT and Stanford

— U.S. News & World Report, 2016–2023

No. 1 in the U.S. for global impact, sustainability and innovation.

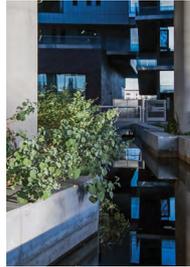


Brochure Folding Diagram

The use of a revolutionary Glass Fiber Reinforced Concrete material developed at ASU and the integration of water-based climate control puts the Walton Center for Planetary Health on track to create a **26% reduction in global warming potential** compared to similarly sized conventional buildings built today. The structure is also able to capture 100% of the rainfall onto the building and redirect it to the landscape that comprises Arizona native riparian habitat vegetation.



The Walton Center for Planetary Health achieves a **LEED-Platinum certification**, a globally recognized symbol of sustainability achievement. Buildings that earn a LEED certification are measured for their features that address carbon, energy, water, waste, transportation, materials, health and indoor environmental quality.



To learn more about the Walton Center for Planetary Health, visit [waltoncenter.asu.edu](http://waltoncenter.asu.edu)



## Help us design a future of opportunities

The “Decisive Decade” is upon us. Our choices of not only the past 200 years but in this moment define the nature of our existence in our world for generations to come.

The Julie Ann Wrigley Global Futures Laboratory is committed to creating a **future of opportunities**, not sacrifices.

Join us in helping bend the arc of human history toward a vibrant, equitable and healthy future for all of Earth's inhabitants.



[globalfutures.asu.edu](http://globalfutures.asu.edu)





**You're looking at me but are you really seeing me?**

— Earth

**ASU** Julie Ann Wrigley  
Global Futures Laboratory  
Arizona State University

Reshaping our  
relationship  
with our world

**Our world is trying to tell us something.**

We have boundless capacity to study our world. But we need to *understand* its connectivity to develop scalable solutions to global challenges and create a healthier trajectory for everything. We're making it happen.

[globalfutures.asu.edu](http://globalfutures.asu.edu)