## The Power of Networks: Sustainability through University & Museum Partnerships



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## Overview

- >What is Sustainability?
- >Why Sustainability in Museums?
- How ASU Works with Museums
- Examples of Sustainability in Museums
- Successes & Best Practices

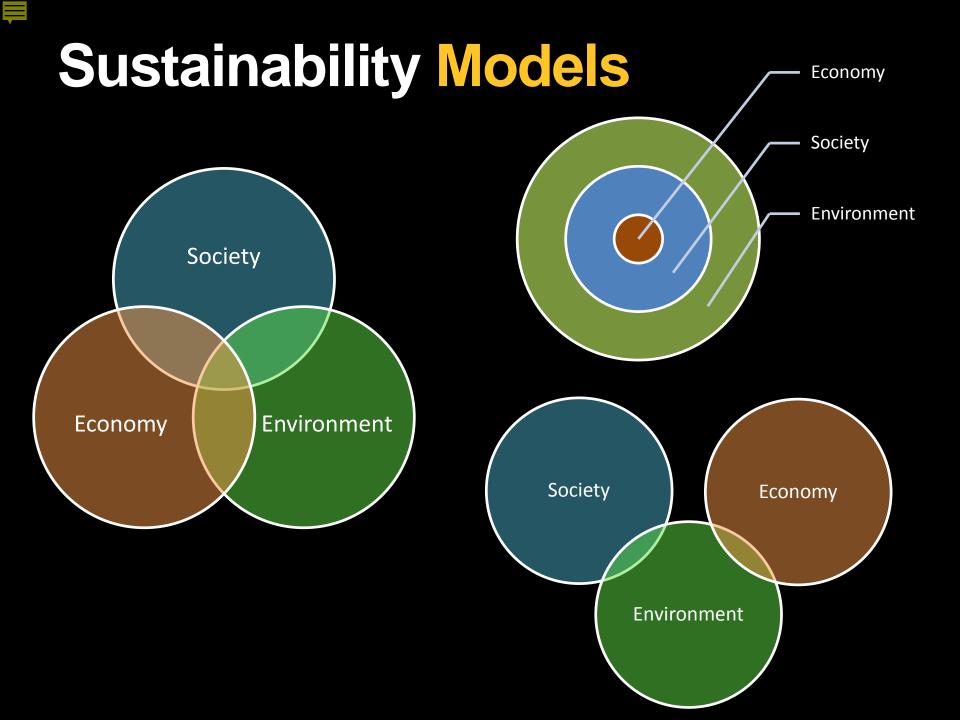


## Sustainability Definitions

"Meet[ing] the needs of present without compromising the ability of future generations to meet their own needs."

-Brundtland Commission

"Living on earth as if we intend to stay." -Sir Crispen Tickell



## Sustainability s

Balances the needs of society to ensure environmental resilience and economic prosperity

- Problem & solution oriented
- Complex and ever-changing
- Futures focused
- Uses systems-thinking to solve problems
- Social justice focused
- Values-laden
- Place-based, with a global awareness
- Has a lot of unintended consequences

## Why Sustainability in Museums?

"Fifty-eight percent of Europeans agree that scientists cannot be trusted to tell the truth about controversial scientific and technological issues."

- European Commission, 2010



# If we don't trust scientists, who do we trust?



## Why **Sustainability** in Museums?

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## Why Sustainability in Museums?

"How much do you trust or distrust the following as a source of information about global warming?"

➤ 35% trust news media

- ➢ 42% trust military leaders
- 72% trust natural history museums

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## Why Sustainability in Museums?

## "How much do you trust or distrust the following as a source of information about global warming?"

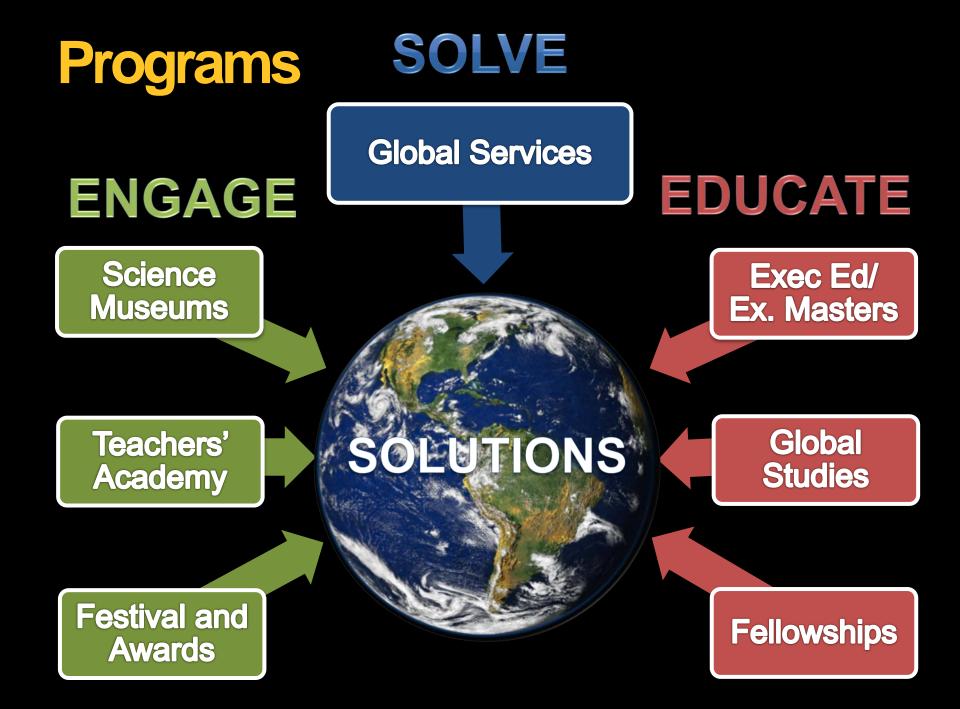
- ➤ 35% trust news media
- ➢ 42% trust military leaders
- 72% trust natural history museums
- 73% trust science museums

(Leiserowitz et al., 2010)

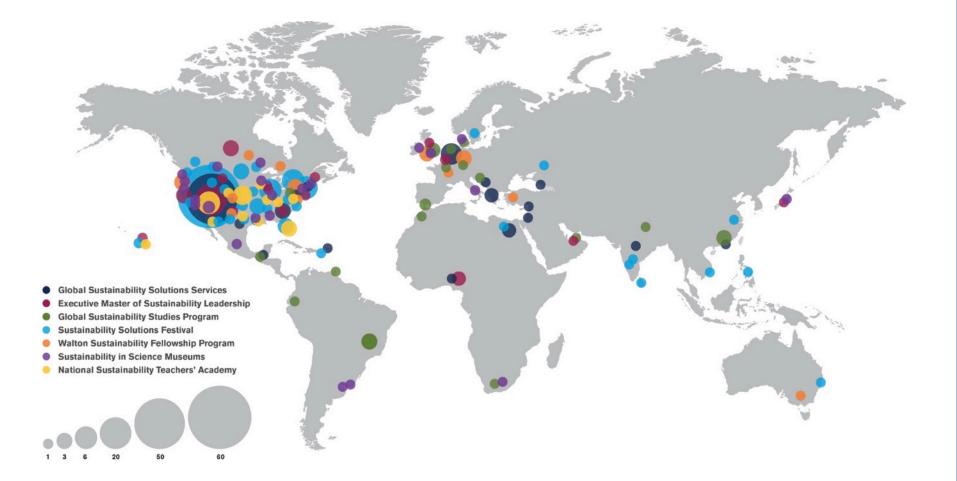
### Rob and Melani Walton Sustainability Solutions Initiatives Arizona State University



### SOLVE global challenges EDUCATE future leaders ENGAGE and inform the public



## Our global impact



### **Sustainability in Science Museums**

Goal: engage the public in sustainability through the educational power of science centers and natural history museums

Launched in February, 2016 with two international initiatives.

Activity Kits, branded sustainABLE
Fellowships, Trainings, & Workshops



## Sustainability Activity Kits

- Co-developed with Science Museum of Minnesota & Ithaca Sciencenter
- Distributed to 75 museums on 4 continents
- Downloadable, open-source at: sustainablekits.asu.edu
- Currently developing Biomimicry Kits



## Fellowships & Workshops

#### International Fellowship

- Attend a week-long, intensive sustainability training at ASU
- Learn from ASU Sustainability Scientists and network with other international fellows
- Develop a project to implement at home institution; receive a project stipend upon completion
- Upcoming Fellowships
  - September 2017 Chicago, IL at Museum of Science and Industry
  - February 2018 Arizona State University

#### Regional Workshops

- Bristol, United Kingdom May 2017
  - In partnership with At-Bristol Science Centre
  - > 28 informal science educators trained
- Portland, Maine July 2017

To-date: 97 Fellows from 25 countries and 36 U.S. States

### **Tap Into Existing Networks**

Led trainings and sessions at 7 international conferences

- Networking led to more invitations for trainings
- Trained over 600 museum professionals since June 2016



### **Reach Since February 2016**

- Engaged 129 Museums & Informal Science Organizations and trained 741 people on 5 continents, 25 countries, and 36 U.S. states.
- These 129 organizations reach more than 50 Million people annually.
- Fellowship projects reached over 125,000 people during the first six months
- SustainABLE kits reached over 40,000 people in the first six months

#### **Ontario Science Center**

#### Project: Video about First Nations youth from Toronto, Ontario

"Indigenous peoples are caretakers of Mother Earth and realize and respect her gifts of water, air and fire. First Nations peoples' have a special relationship with the earth and all living things in it."

- Canadian Assembly of First Nations

"This Project was for us as much about the Process as well as the Product, consequently, the Ontario Science Centre will be using this project first of all as a way of building trust with Indigenous communities" – Vishnu

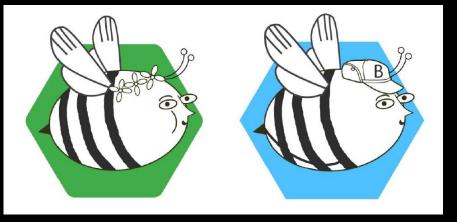


#### **At-Bristol Science Centre**

Project: Live from the Hive

- Twitter Feed
- Mural
- Hive on the Roof
- BBC "Spring Watch"
- Film Screening
- Public Floor







Miraikan - The National Museum of Emerging Science and Innovation

Project: Adapted FutureBuilder

 Created a 30-minute workshop and their own version of the game

"When I played your Future Builder in Miraikan, visitors understood that relations among environment, economy and society are complicated. In my workshop, I wanted to give people a general idea that may help. That is 'The successful pursuit of sustainability almost always requires the participation of many different stakeholders'. I'm also happy to find that the message is very close to Miraikan's mission." - Chenchen



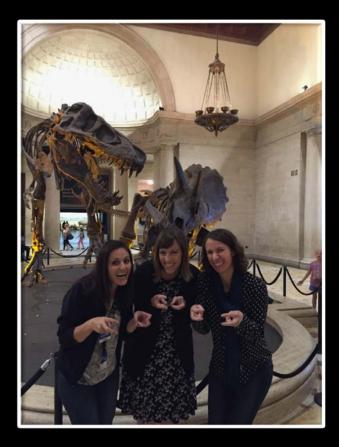


Natural History Museum of Los Angeles County

Project: Sustainability Task Force & Organizational Change

- August 2016 Staff Training
- Monthly Meetings

"Our Sustainability Taskforce has been asked to participate in the current 10year visioning and strategic planning process the museum is undergoing, to ensure that sustainability issues and ideas are included in the planning. We are working on this organizational change thing, and so far so good!" - Tiffany



### University/Museum Collaborations: What Works

- Listen to the needs of the field
- Tap into existing networks
- Collaborate with like-minded organizations
- Clearly articulate roles & expectations
- Co-create programs
- Garner leadership support
- Create incentives

Rodegher, S.L., Freeman, S.V. (2017). University-museum partnerships: Reflections on programmatic best practices for sustainability collaborations. *Journal of Sustainability Education*, 13 (March).

## **Thank You**



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