



## BIOENERGY FOR SUSTAINABLE DEVELOPMENT

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Sustainable Bioenergy High-Impact Opportunity

Sustainable Energy For All

## Overview

- Energy poverty is widespread and prevents economic development
- The international development community is beginning to act
- Momentum is building to grow the bioeconomy across the globe



## Energy Poverty: Statistics

- 1.2 Billion people lack access to modern energy services
  - *0.5 Billion in sub-Saharan Africa*
- 2.7 Billion people lack sufficient energy to cook with anything but charcoal or biomass



## International Efforts to end Energy Poverty

Energy is the golden thread that connects economic growth, increased social equity and an environment that allows the world to thrive.

-- UN Secretary-General Ban Ki-moon

Ending poverty and ensuring sustainability are the defining challenges of our time. Energy is central to both.

-- Jim Yong Kim - World Bank Group President



SUSTAINABLE  
ENERGY FOR ALL



SUSTAINABLE ENERGY FOR ALL



SUSTAINABLE ENERGY FOR ALL

### Defined by three goals:

Achieving the three objectives of Sustainable Energy for All...

... makes many development goals possible



Ensuring universal Energy Access

- Improved health
- Improved agricultural productivity
- Empowerment of women
- Business and employment creation
- Economic development
- Achievement of the Millennium Development Goals



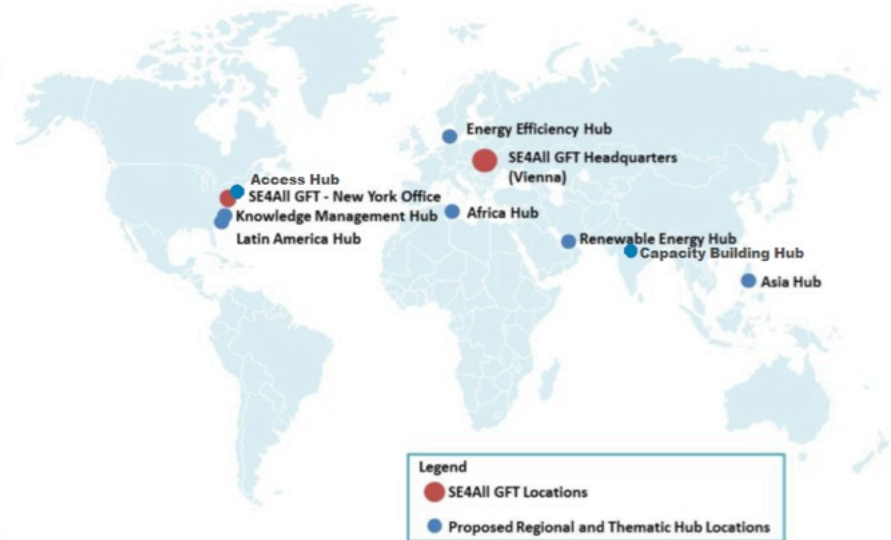
Doubling the share of Renewable Energy

- Affordable energy even where grid does not reach
- New opportunities for small entrepreneurs
- Decreased variability in energy costs
- Energy security and reduced import bills
- Reduced environmental impacts



Doubling the rate of improvement in Energy Efficiency

- Lighting / appliances that require less power
- Fossil fuel resources used more effectively
- Reduced energy costs for consumers
- Redistribution of electricity that now is wasted or lost
- More reliable electricity systems





SUSTAINABLE  
ENERGY FOR ALL

The SE4A initiative is uniquely positioned...

...to achieve the three objectives by 2030

- Unparalleled convening power
- Ability to mobilise the boldest commitments
- Shared commitment by partners ensuring coordination
- Capacity to leverage large-scale investments
- Large and rapidly expanding knowledge network



## SE4ALL High Impact Opportunities



UNIVERSAL ADOPTION  
OF CLEAN COOKING  
SOLUTIONS



ENERGY AND WOMEN'S  
HEALTH



INNOVATIVE FINANCE



PHASE-OUT OF GAS  
FLARING FROM OIL  
PRODUCTION

## Sustainable Bioenergy HIO

- Clean Cooking Solutions
- Increased Agricultural Productivity
- Energy from Municipal Solid Waste
- Sustainable Aviation Biofuels
- Cellulosic Ethanol

### PUBLIC SECTOR

Governments Donors  
Multilateral Organizations  
Development Banks

### PRIVATE SECTOR

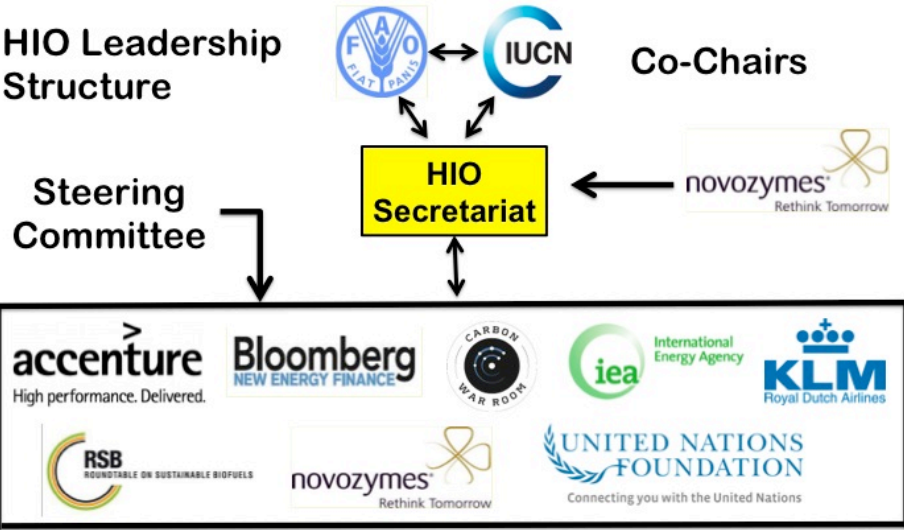
Multinationals  
Local Entrepreneurs  
Private Capital







**HIO Leadership Structure**

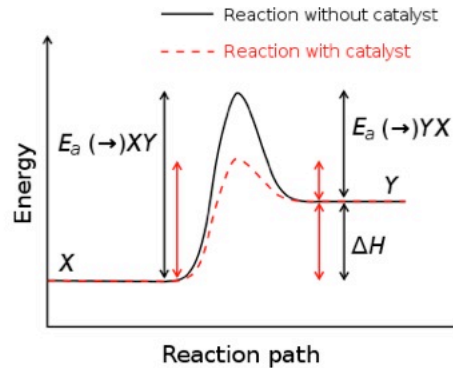


**High Impact Initiatives PROJECTS**

**Reducing transaction costs**

Barriers to deployment in developing countries

- National, local policy
- Culture
- Finance
- Technology capacity

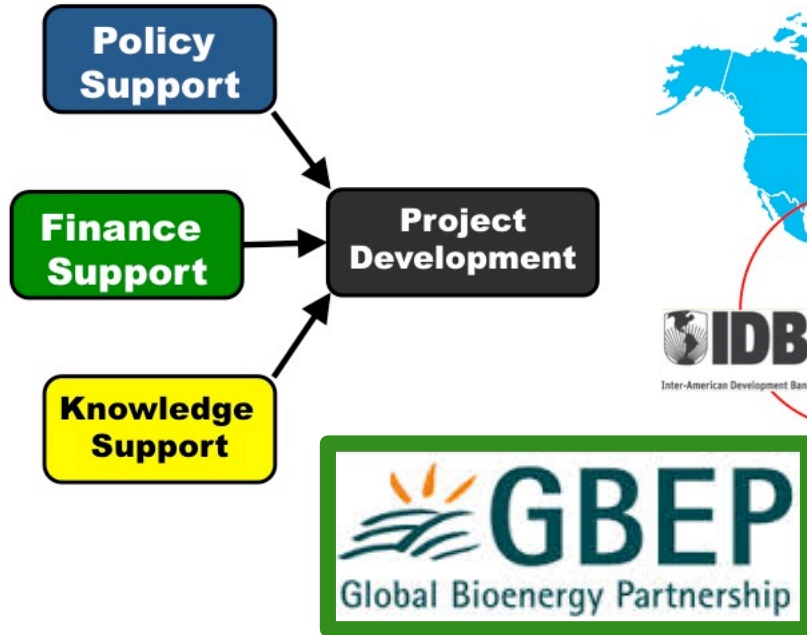


The Sustainable Bioenergy HIO will facilitate deployment by reducing transaction costs



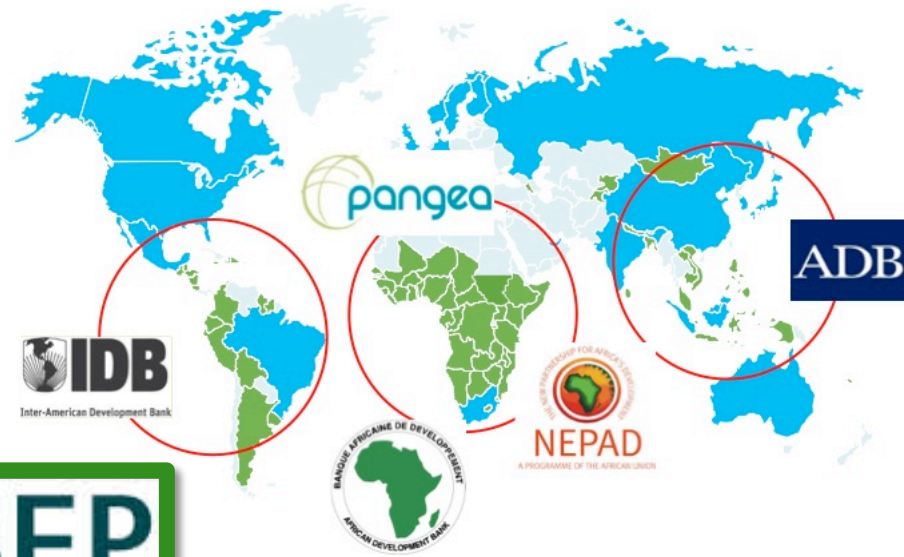
We seek to reduce the transaction costs to Sustainable Bioenergy development & deployment

- UN FAO
- IUCN
- UN Foundation
- Accenture Development Partnerships
- Bloomberg New Energy Finance
- Carbon War Room
- Roundtable Sustainable Biomaterials
- IDB
- Addax Bioenergy
- Boeing
- KLM/SKYNRG
- Novozymes
- PANGEA
- Shell



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Sustainable Bioenergy High-Impact Initiatives will partner with Development Banks to finance projects





## Global Opportunities to Source Renewable Carbon



## Platform for Bioenergy Deployment







# SE4ALL Sustainable Bioenergy HIO

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## Platform for Bioenergy Deployment

