

# New Paths to a Renewable Carbon Economy

**GBEP – Argentina Bioenergy Week**

October 2018

*Gerard J. Ostheimer, Ph.D.*

Global Lead  
Bioenergy Accelerator  
SEforALL

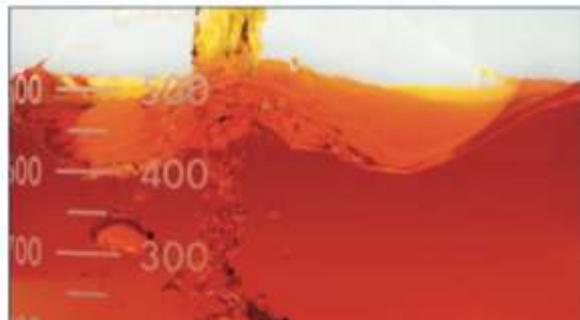


Co-Founder &  
Senior Advisor  
below50

# NARRATIVE

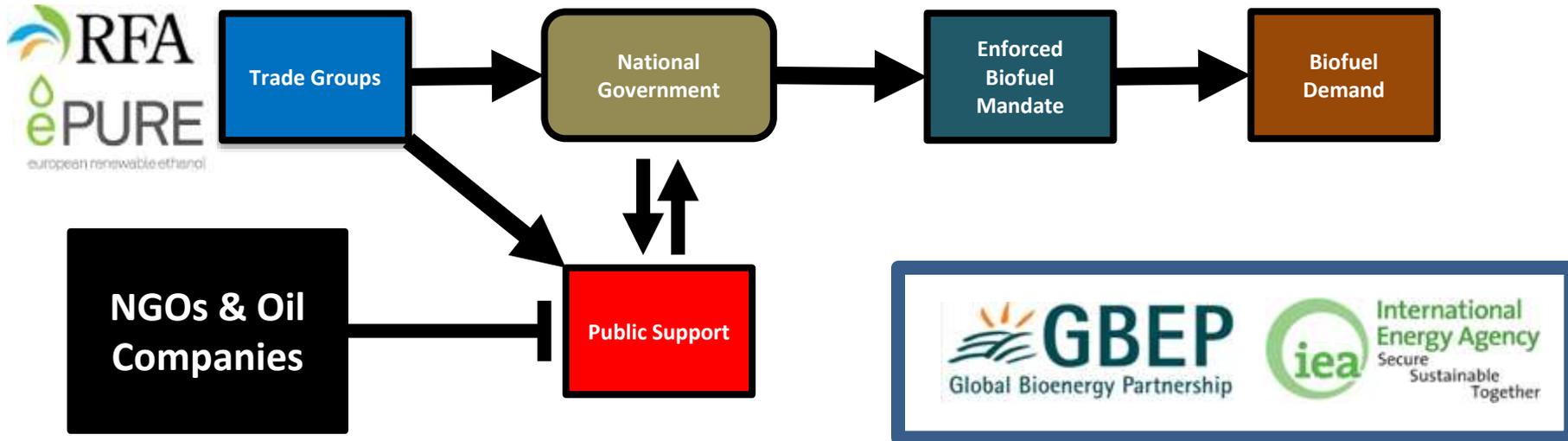
- The Bioeconomy “Policy-to-Action” Ecosystem is expanding and evolving.
- The private sector will increasingly drive uptake of low carbon products.
- A concerted effort is needed to leverage the bioeconomy for Sustainable Development in biomass rich developing countries.

Low carbon fuels are essential to achieving our environmental, social and economic goals



# Biofuels Ecosystem from 2008 to 2015

- Demand was entirely policy driven.
- Producers and trade groups were the primary policy advocates.
- The international RE policy environment was typically hostile to biofuels from NGO input.
- The work of International Technical Agencies was **NOT** connected to national policy development.



# The International Community envisions a sustainable, low carbon future

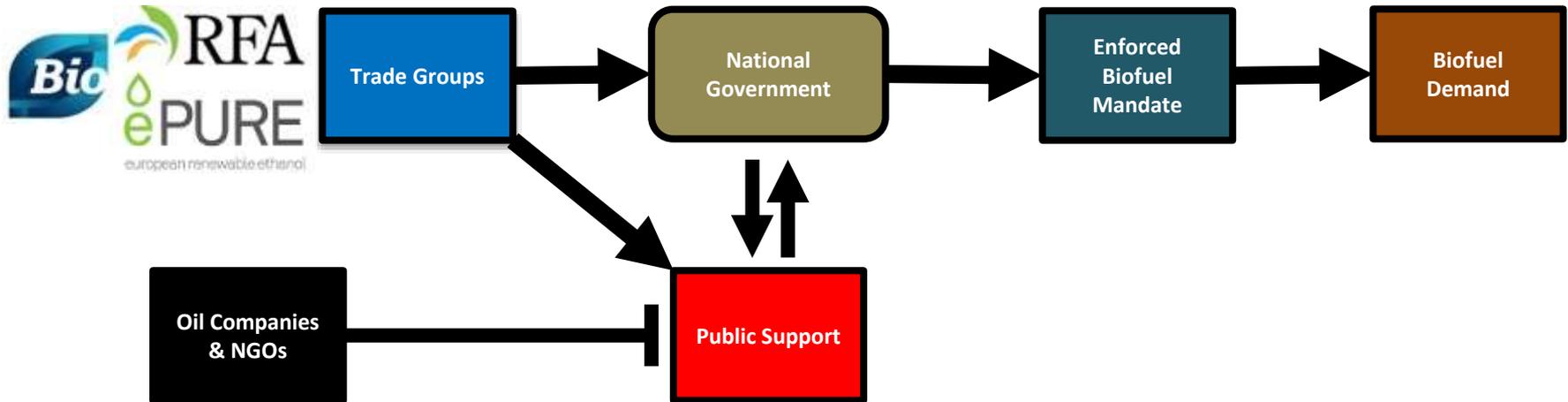


*In 2015 the international community agreed to new Sustainable Development Goals and to work to combat climate change.*

***How do we translate this high level interest into meaningful on the ground deployment?***

- 1) Identify national champions (i.e. political will) &
- 2) Create markets (i.e. engage the private sector)

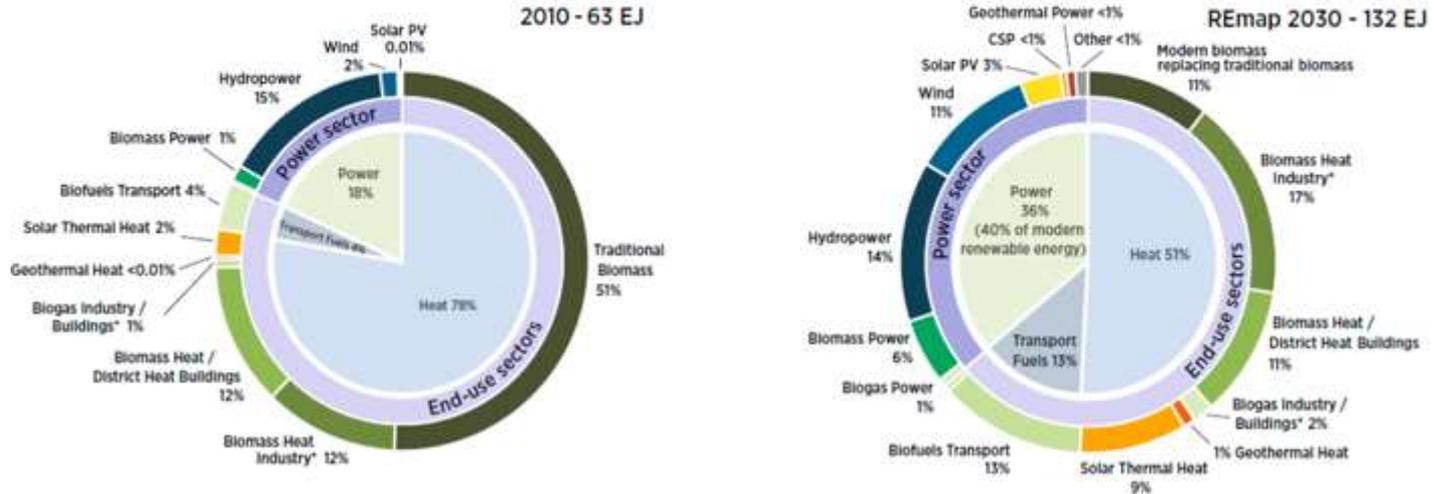
# The Paris Agreement energized international and sub-national groups that are working to de-carbonize transport



# International Agencies are raising awareness of the need for sustainable bioenergy, fuels and materials.

## Global renewable energy use by technology and sector, 2010 and in REmap 2030

REmap 2030  
A Renewable Energy Roadmap



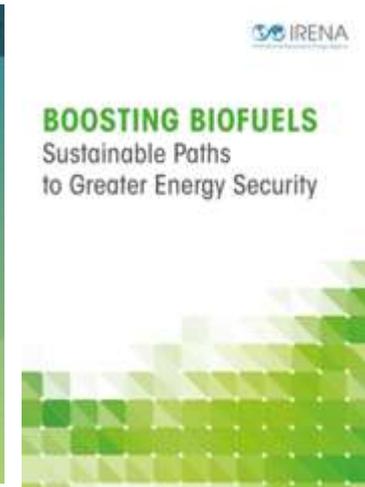
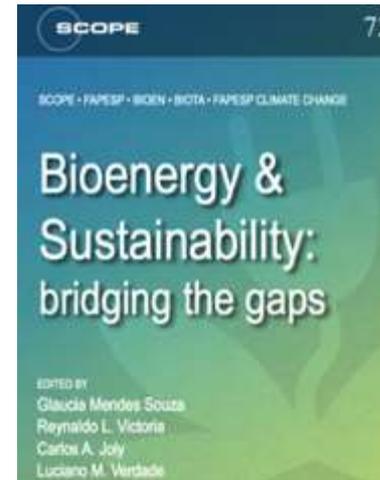
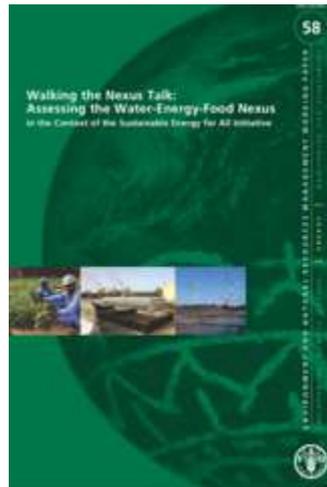
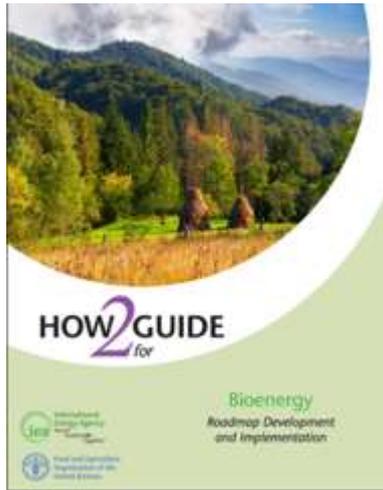
**Sustainable Bioenergy is needed to substitute for fossil fuel use in the HEAT, POWER and TRANSPORTATION sectors.**



# Promoting Bioenergy

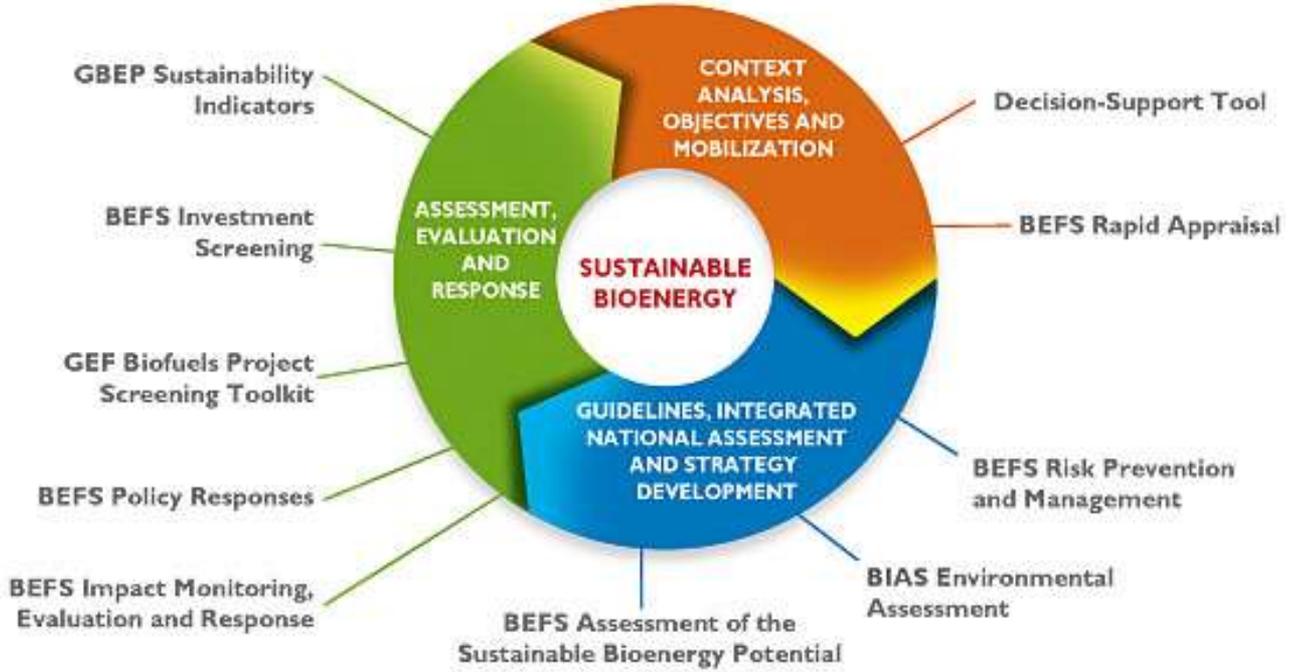


**Numerous International Technical Agencies** are promoting increased bioenergy production and use by information sharing.



# The message that “Bioenergy can be done right” is getting through.

➤ The approach of providing practical tools is most relevant.



# Renewable Carbon for broad-based Sustainable Development



- CO<sub>2</sub>
- Biomass
- Manure
- Garbage

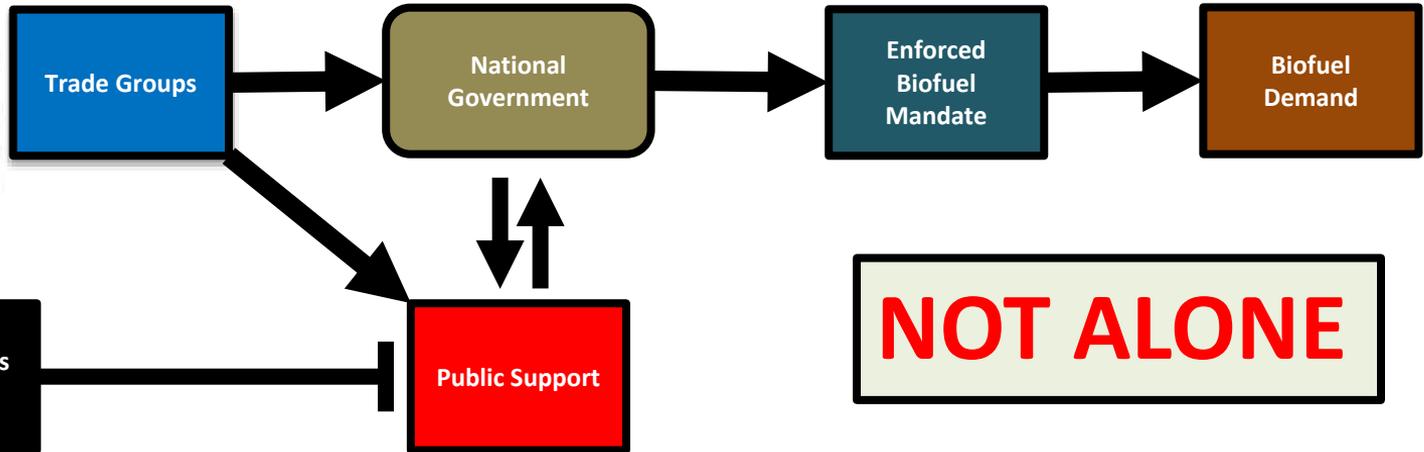
- Electrochemical
- Photochemical
- Thermochemical
- Bio-catalyzed
- Photosynthetic

- Building Materials
- Plastics
- Fuels
- Food + Feed

# Can this expanded policy-advocacy ecosystem drive demand?

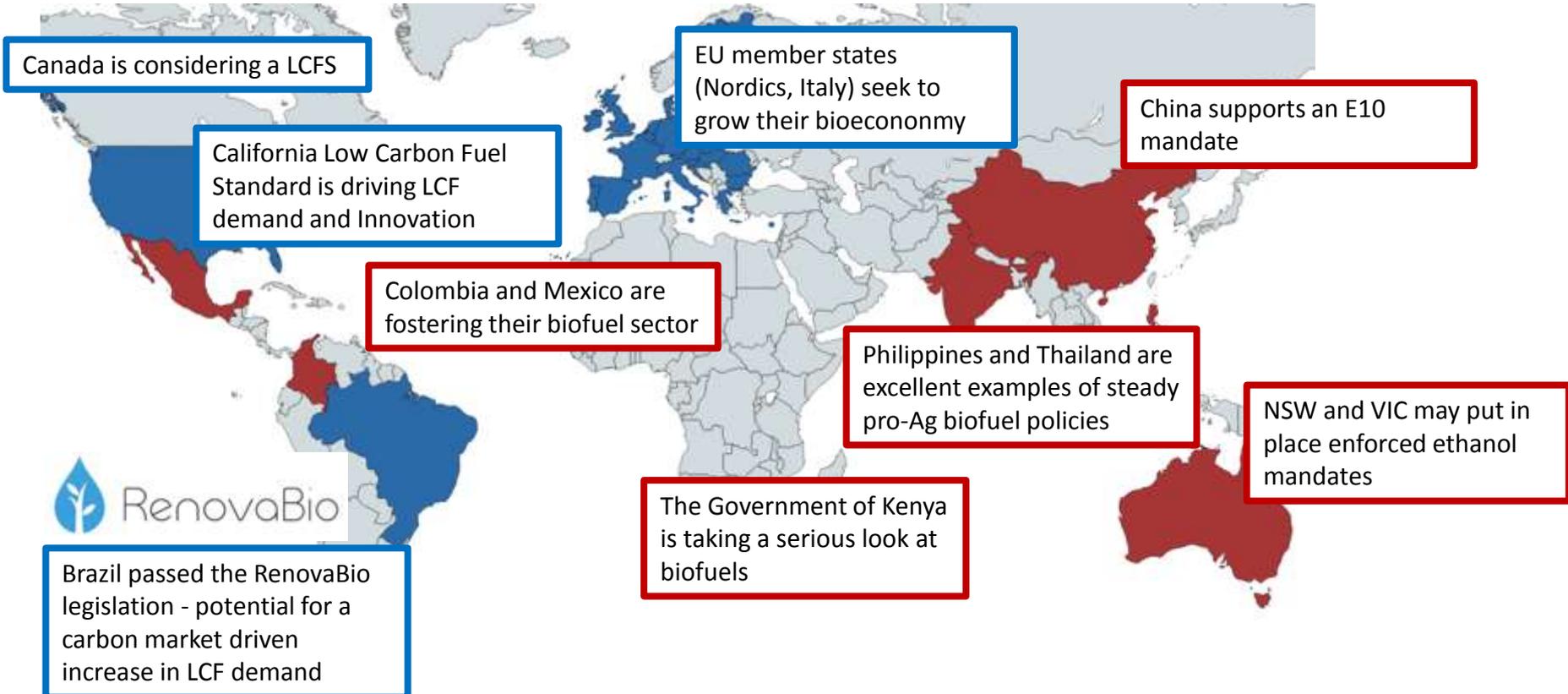


IEA Bioenergy



# Biofuels are making progress in new ways

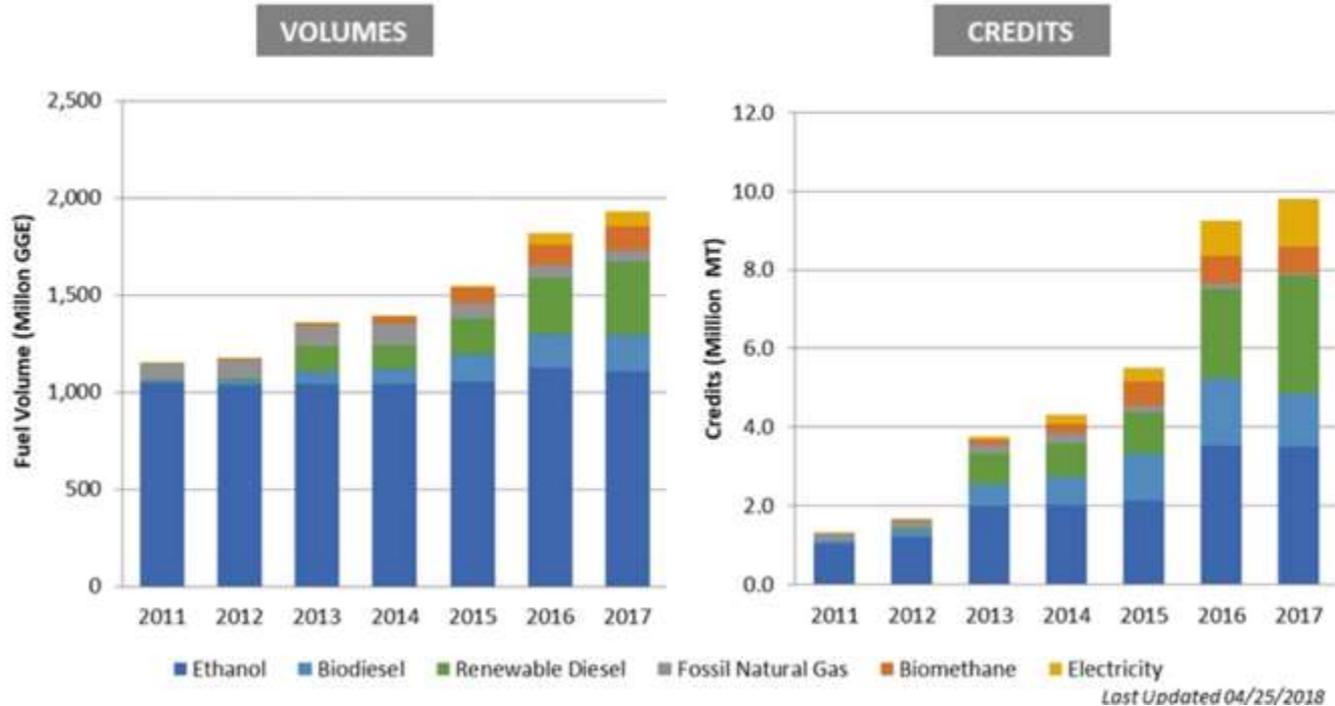
- The Paris Agreement is encouraging a serious look at de-carbonizing transport
- Progress is being made at the National and sub-National level



# POLICY BRIGHT SPOT



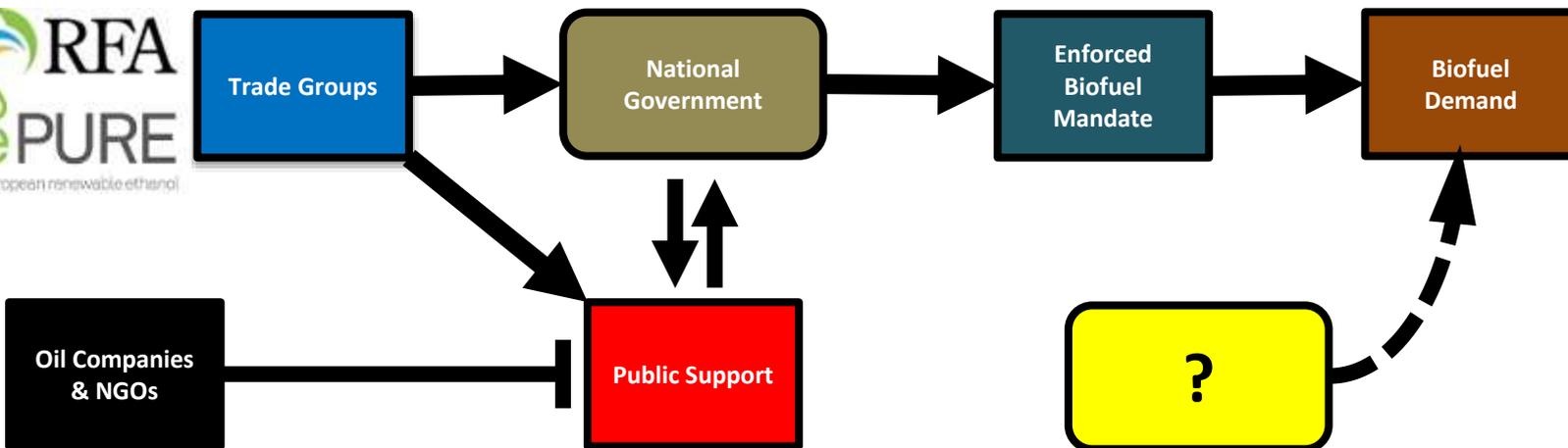
## Alternative Fuel Volumes and Credit Generation



New renewable diesel plants are being built in Nevada because of the LCFS.

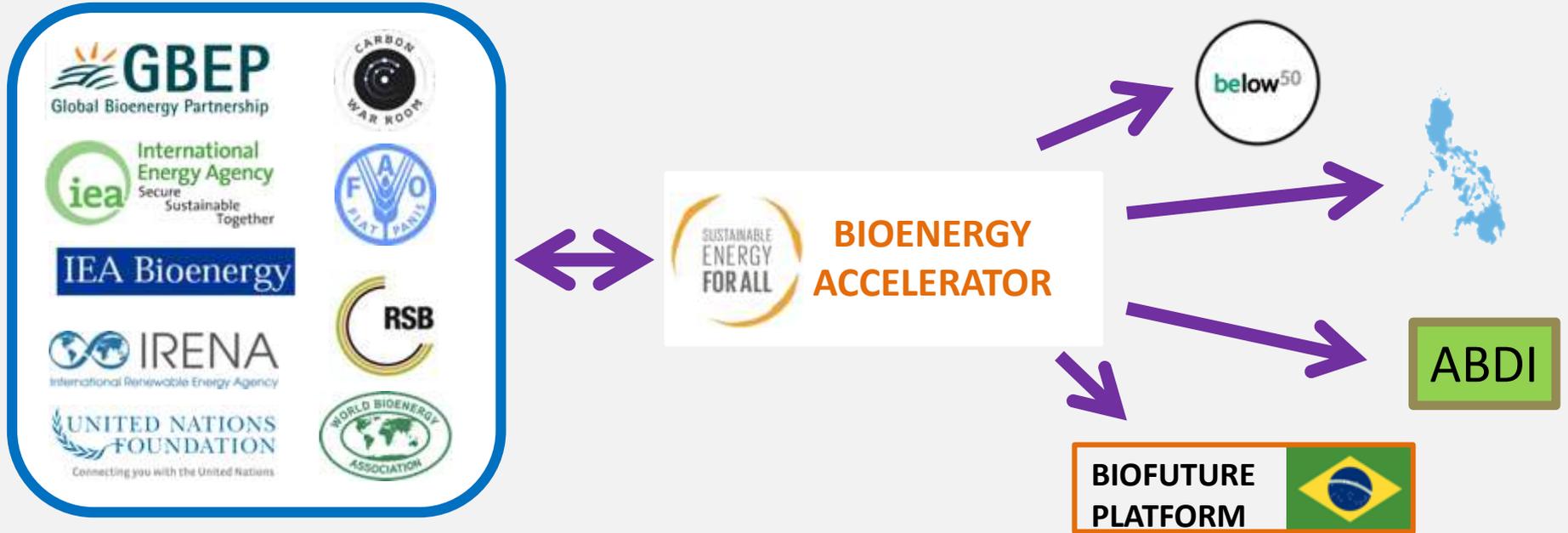


# What more can we do to increase LCF demand?





# Increasing the impact of international agencies



The Accelerator connects leading renewable energy and climate change institutions to the private sector in order to foster enabling environments for bioenergy.

# below50 – Growing the Global Market for the World’s Most Sustainable Fuels



PUBLIC



PRIVATE



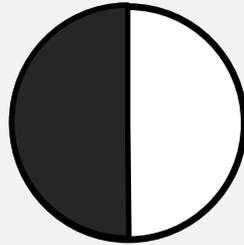
MARKETS



INVESTMENT



below50 fuels

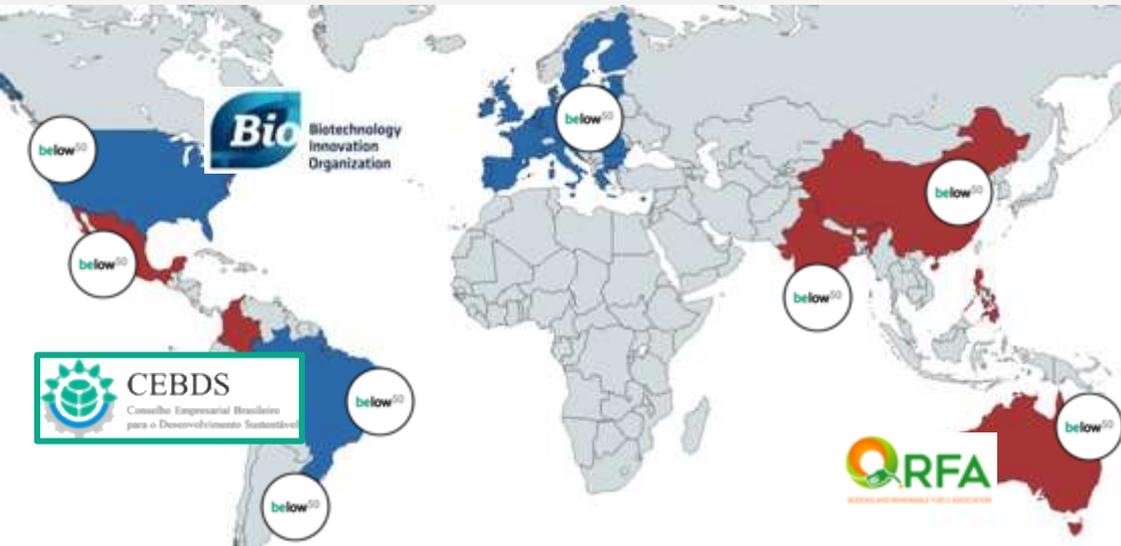


Less than ½ CO<sub>2</sub> emissions of fossil fuels





- Establishing regional and national hubs
- Creating demand within national context



**2017 Wins**

- Launched below50 Australia, below50 Brazil & below50 North America
  - Australia membership growing rapidly
- Strong partnership with Biofuture Platform, IEA, IRENA and Biofuels Digest

**2018 Goals**

- Initiate work on below50 Argentina, below50 China and below50 Mexico
- Deliver corporate LCF procurement guide
- With WMB deliver "all of company" solutions for decarbonizing business operations
- With SkyNRG recruit 20+ corporate buyers to below50
- With CA LCFC, enable SAF for SFO
- Strong presence at CA Climate Summit, ABLC Next and COP24



**below50** – Leveraging business climate commitments to drive LCF demand

**WE MEAN BUSINESS**

**RE**

**EP**

**EV**

**100**

**100**

**100**



**THE CLIMATE GROUP**



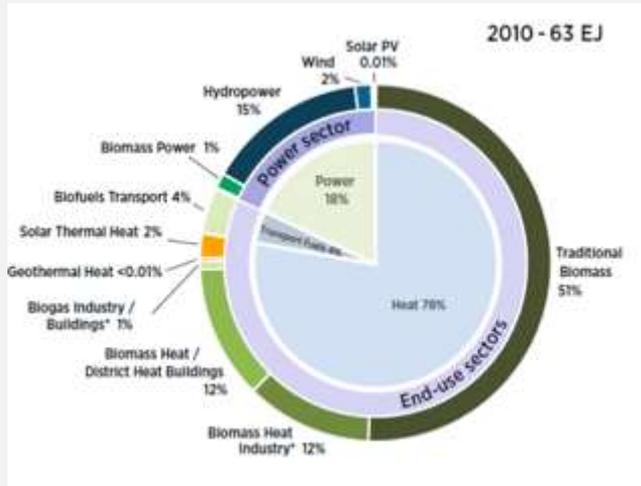




# Africa Biomass Data Initiative (ABDI)

## CHALLENGE

Data sources for biomass use for energy are sparse and uncoordinated.



“Traditional Biomass” use is a rough estimate.

## PROBLEM

Not knowing current biomass use and the potential for bioenergy results in

- 1) Environmental degradation &
- 2) Missed economic opportunity.

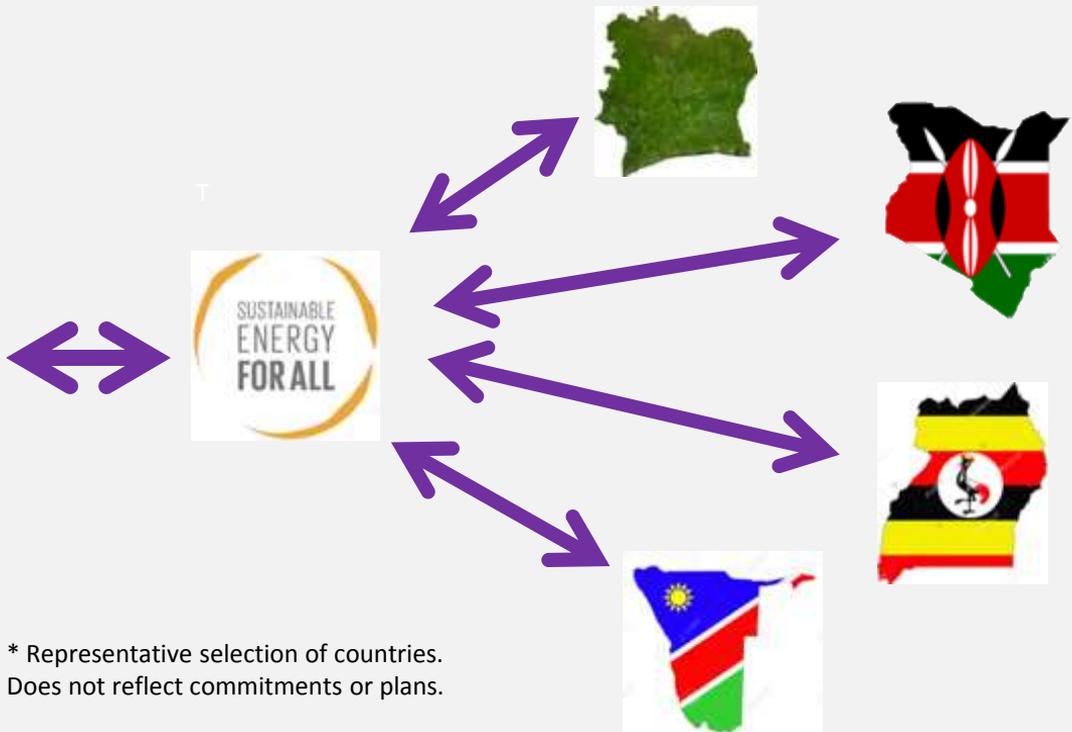


Several regions of SSA should be engines of the global bioeconomy.



# African Biomass Data Initiative

GOAL: Leverage SEforALL's convening power to drive capacity building for biomass data acquisition, analysis and use in policy making at the national level\*.



\* Representative selection of countries. Does not reflect commitments or plans.



Sponsored by



**Gerard J. Ostheimer, Ph.D.**  
**[ostheimer@wbcasd.org](mailto:ostheimer@wbcasd.org)**