

# ENERGY INNOVATION 2013

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**President, ITIF**

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# www.energyinnovation.us/build



## Build your own Energy Innovation Budget

CREATE YOUR BUDGET

SCALE TO ACTUAL BUDGET

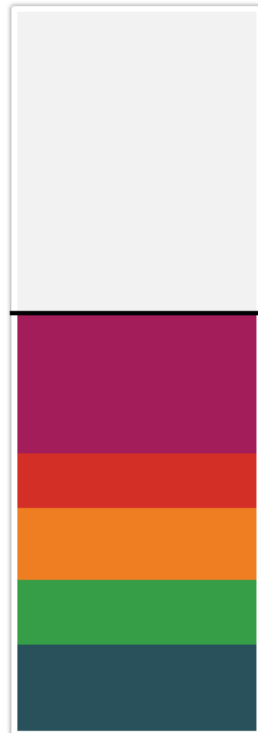
COMPARE WITH THE U.S. BUDGET

Mitigating climate change requires aggressive public investments in clean energy innovation. For comparison, the budget for the National Institutes of Health is about \$30 billion, while the R&D budget at the Defense Department is around \$70 billion.\* What would your clean energy innovation investment breakdown look like given a budget that split the difference - \$50 billion?

**YOUR BUDGET** \$50.00 billion

**SPENT** \$29.00 billion

**REMAINING** \$21.00 billion



### RESEARCH AND DEVELOPMENT

RESET

\$ 9.75 billion

Basic science research and research of specific designs or technologies to address explicit technological needs; includes prototyping.

### DEMONSTRATION

\$ 3.75 billion

Full-scale, proof-of-concept operating models of new technologies, intended to show their practical utility to potential users and to gather technical and economic data.

### MANUFACTURING

\$ 5.00 billion

Support for the domestic clean energy manufacturing sector, including investments in making manufacturing more innovative and energy efficient.

### PROCUREMENT

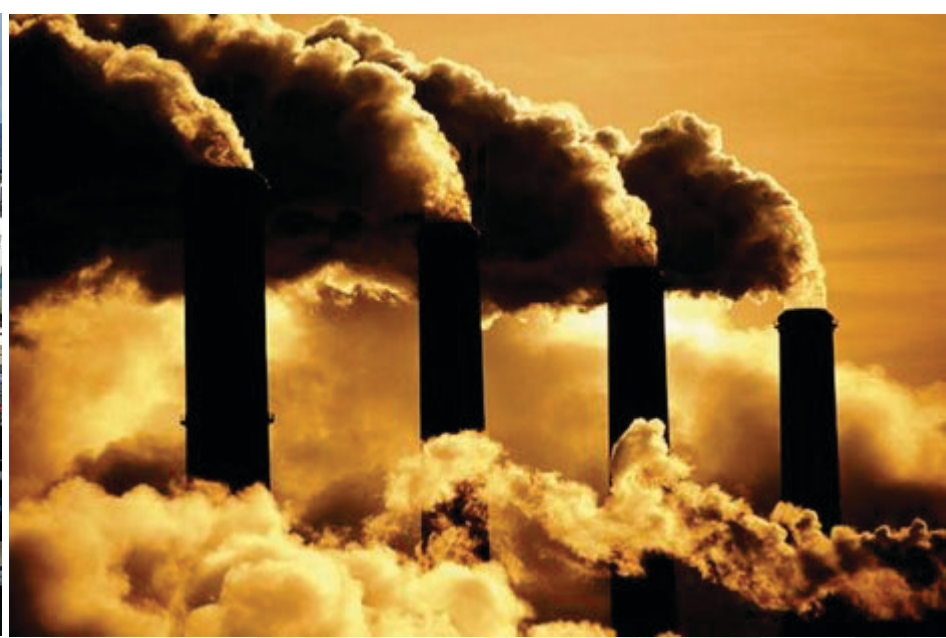
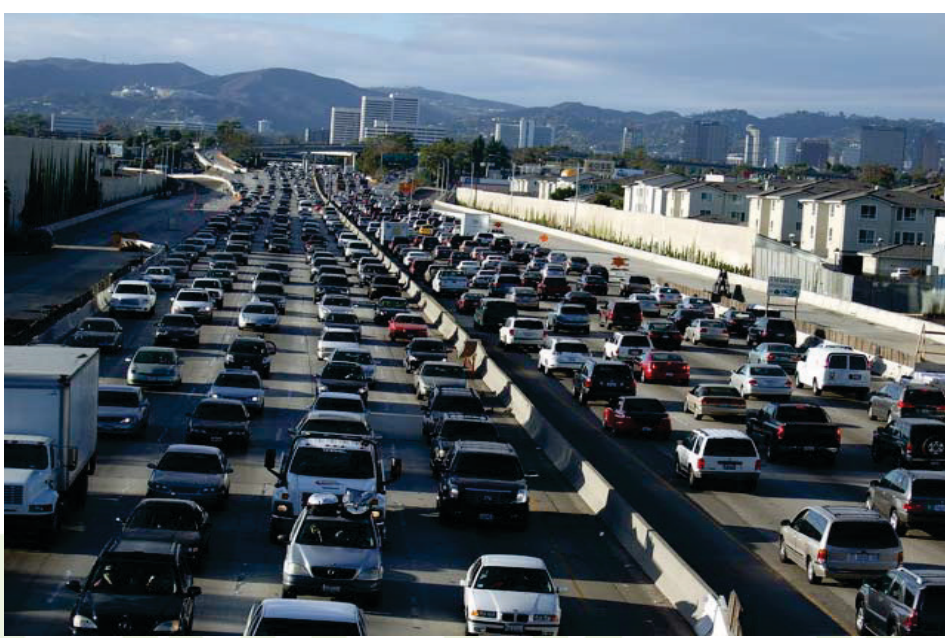
\$ 4.50 billion

Acquisition of energy technologies by the federal government. Applies to the procurement of both emerging and commercial off-the-shelf technologies.

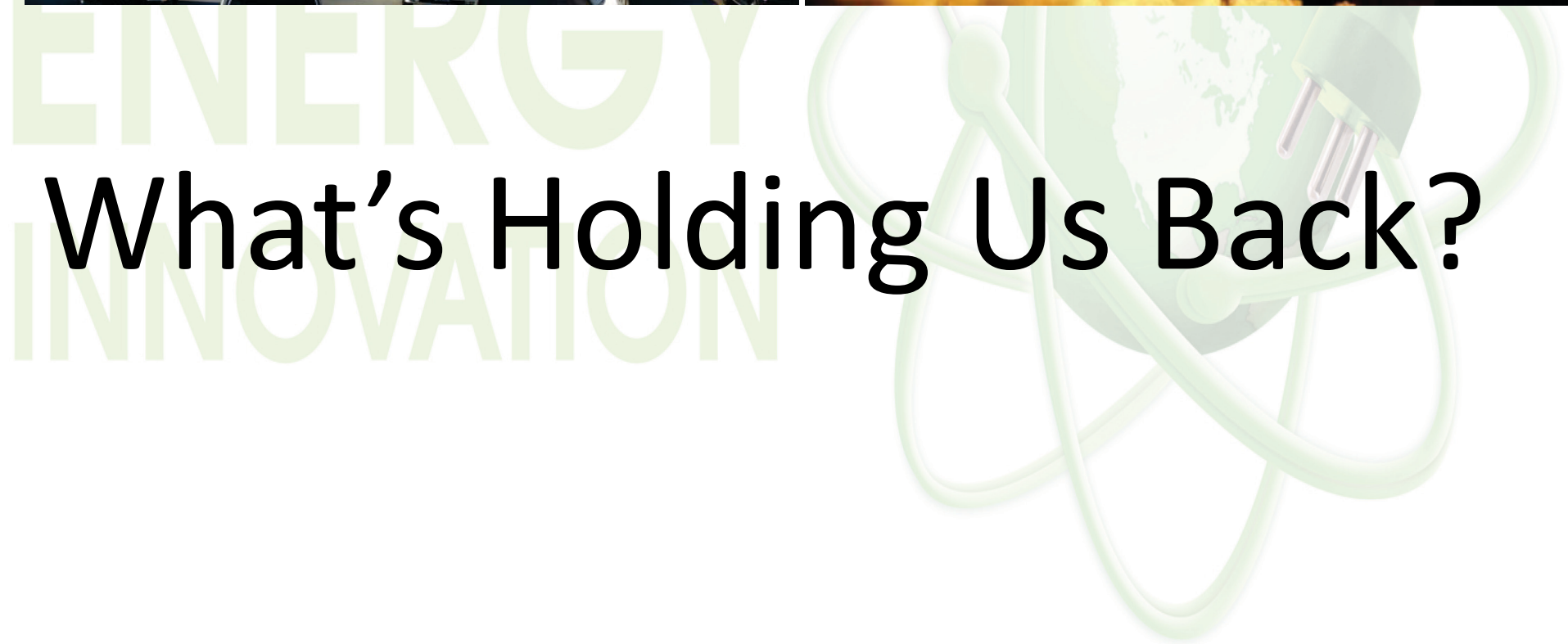
### DEPLOYMENT

\$ 6.00 billion

Installation and use of technologies or equipment on a substantial scale, thus creating economies of scale. Applies to the deployment of both emerging and commercial off-the-shelf technologies.



**What's Holding Us Back?**





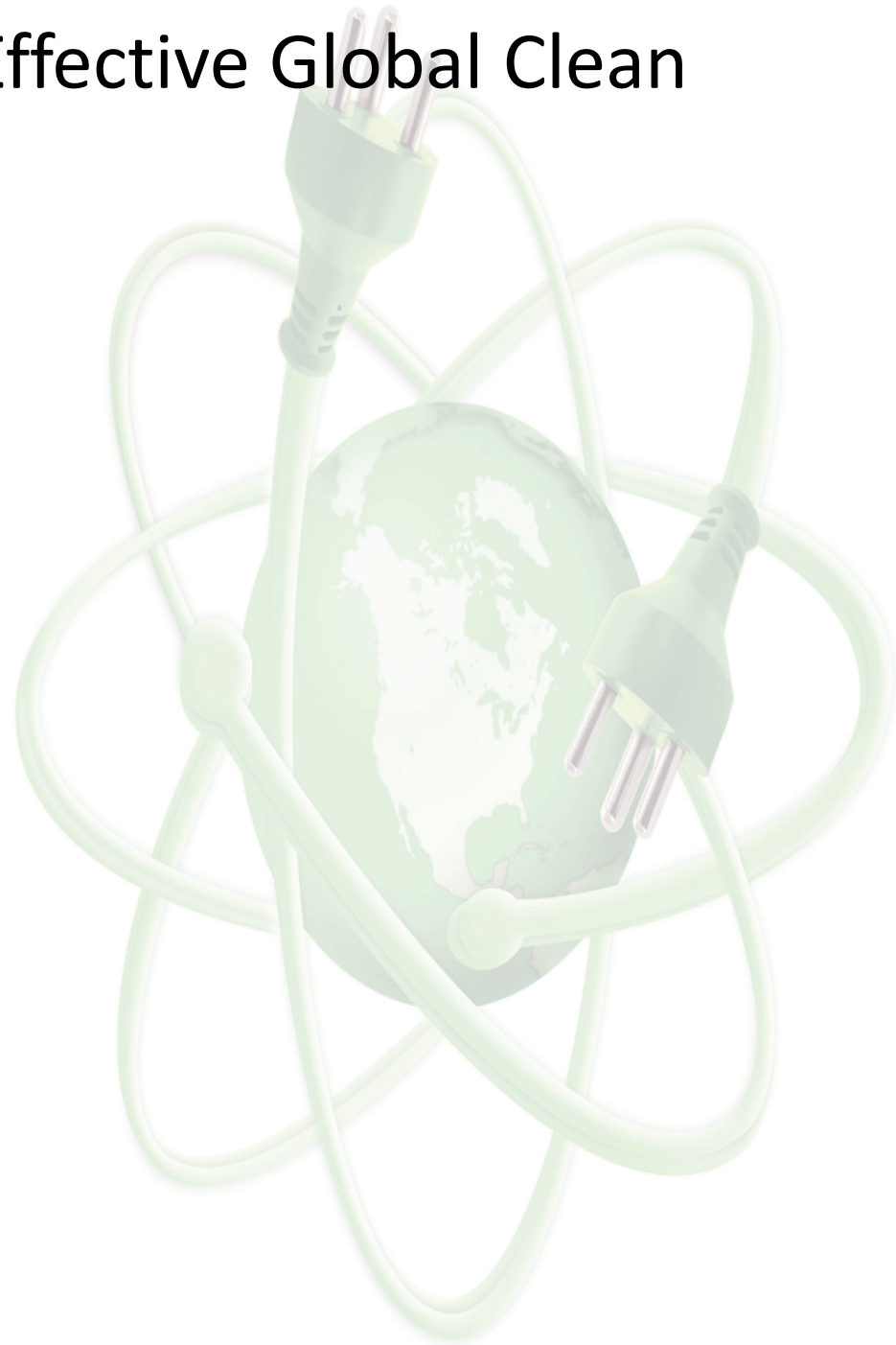
# ■ A Chain of Illogic



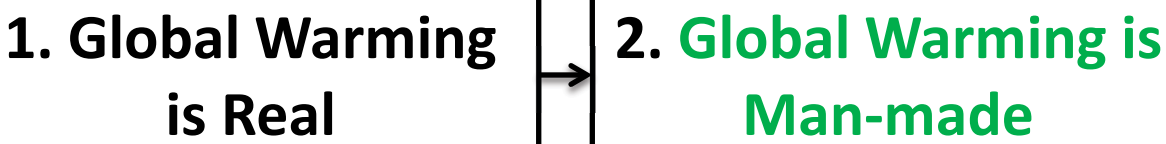
# ■ Logic Chain to Get to an Effective Global Clean Energy Policy

## 1. Global Warming is Real

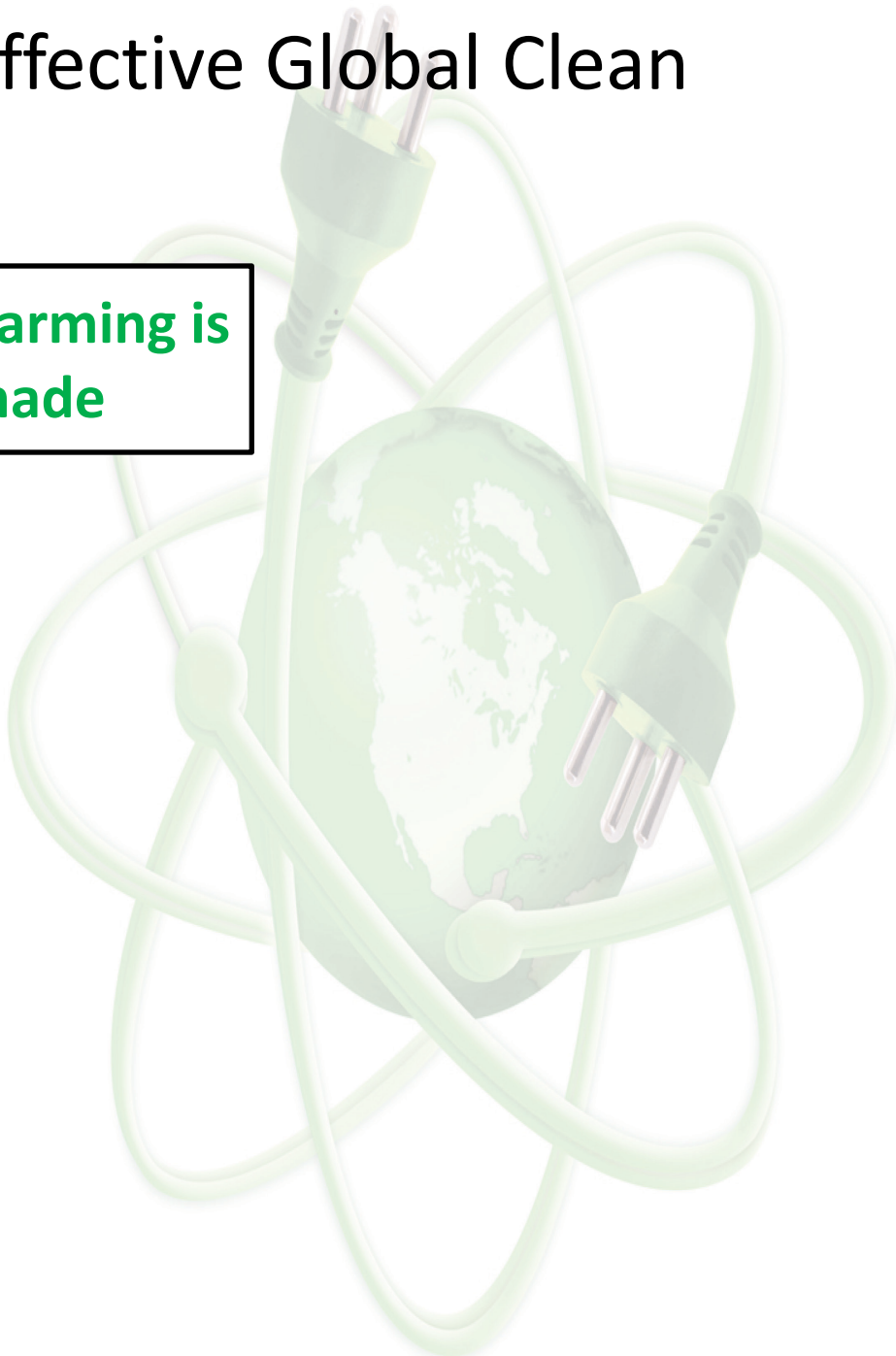
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■ Logic Chain to Get to an Effective Global Clean Energy Policy



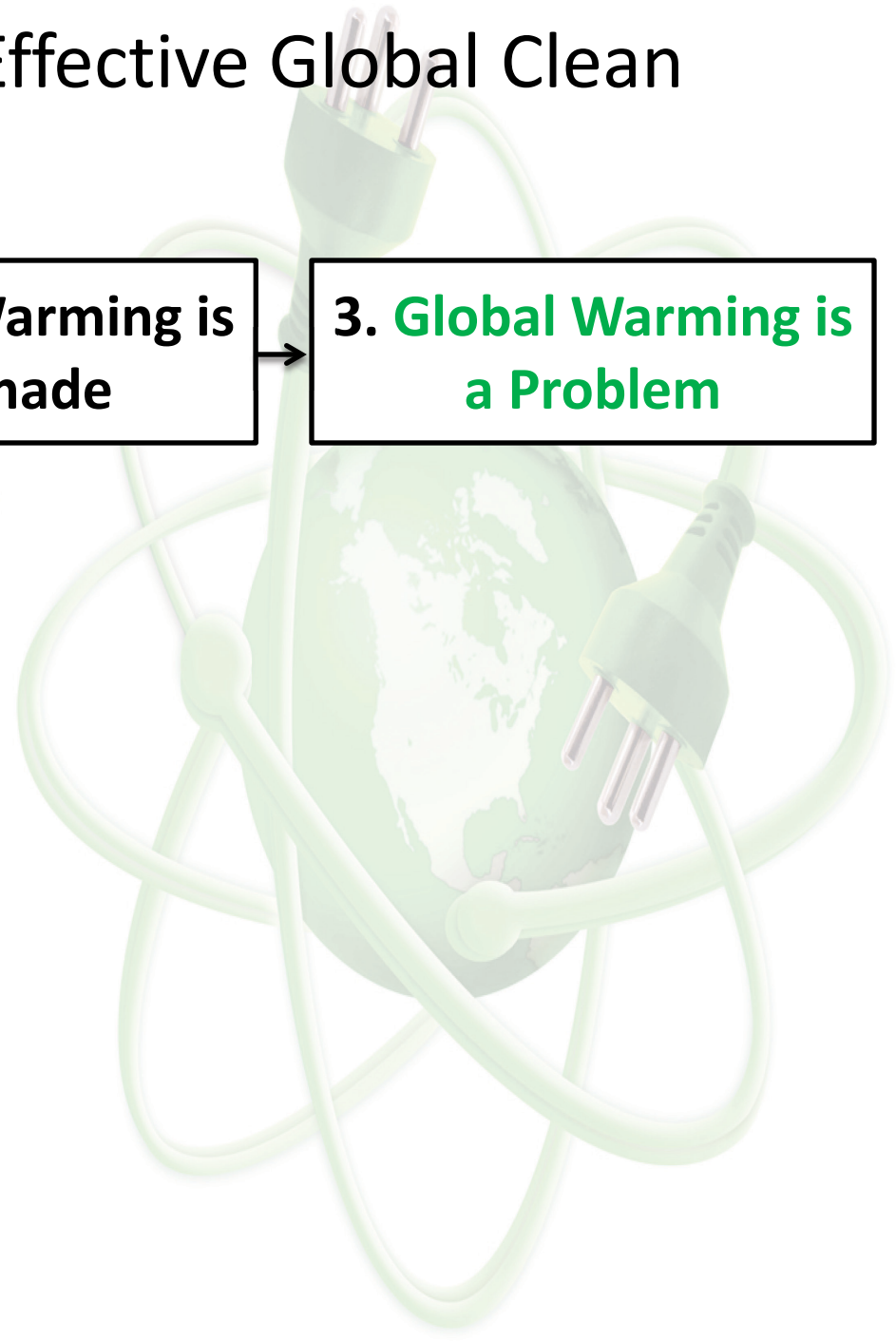
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■ Logic Chain to Get to an Effective Global Clean Energy Policy



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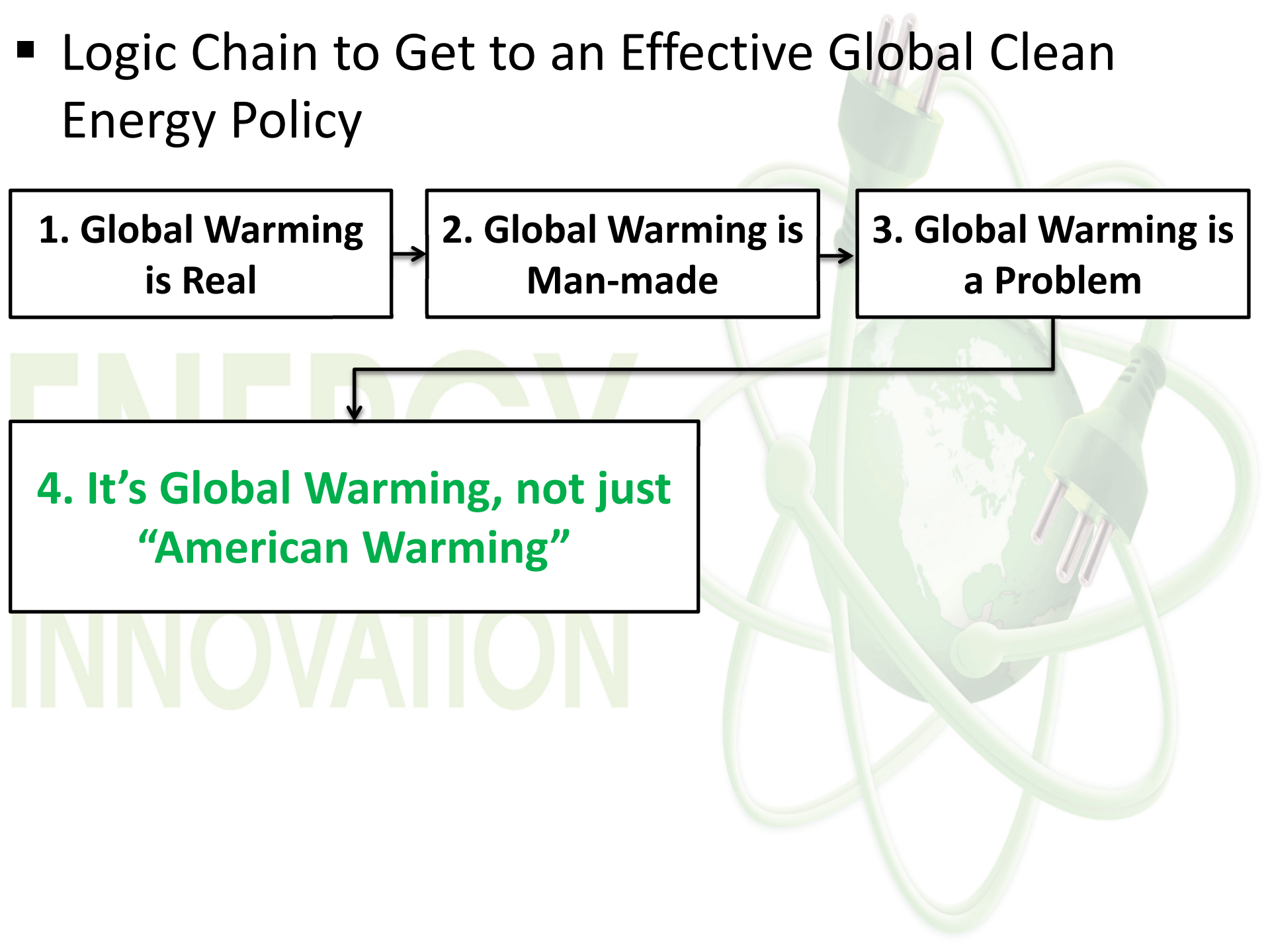
# ■ Logic Chain to Get to an Effective Global Clean Energy Policy

**1. Global Warming is Real**

**2. Global Warming is Man-made**

**3. Global Warming is a Problem**

**4. It's Global Warming, not just "American Warming"**



# ■ Logic Chain to Get to an Effective Global Clean Energy Policy

**1. Global Warming is Real**

**2. Global Warming is Man-made**

**3. Global Warming is a Problem**

**4. Global Warming is Global**

**5. GHG emissions should be as close to ZERO as possible**

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# ■ Logic Chain to Get to an Effective Global Clean Energy Policy

**1. GW is Real**

**2. GW is Man-made**

**3. GW is a Problem**

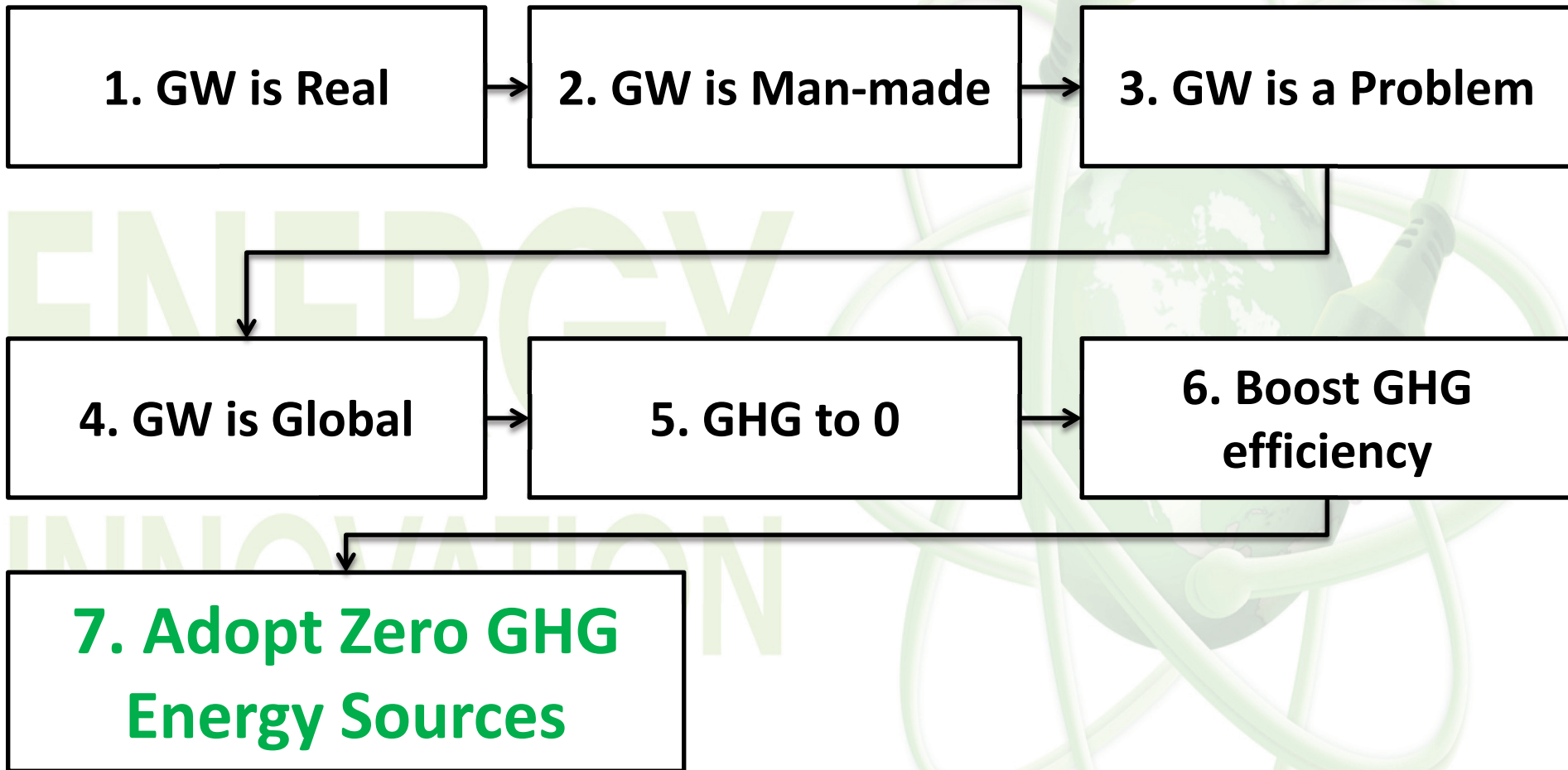
**4. GW is Global**

**5. GHG to 0**

**6. Only way to do this is to  
boost GHG efficiency**

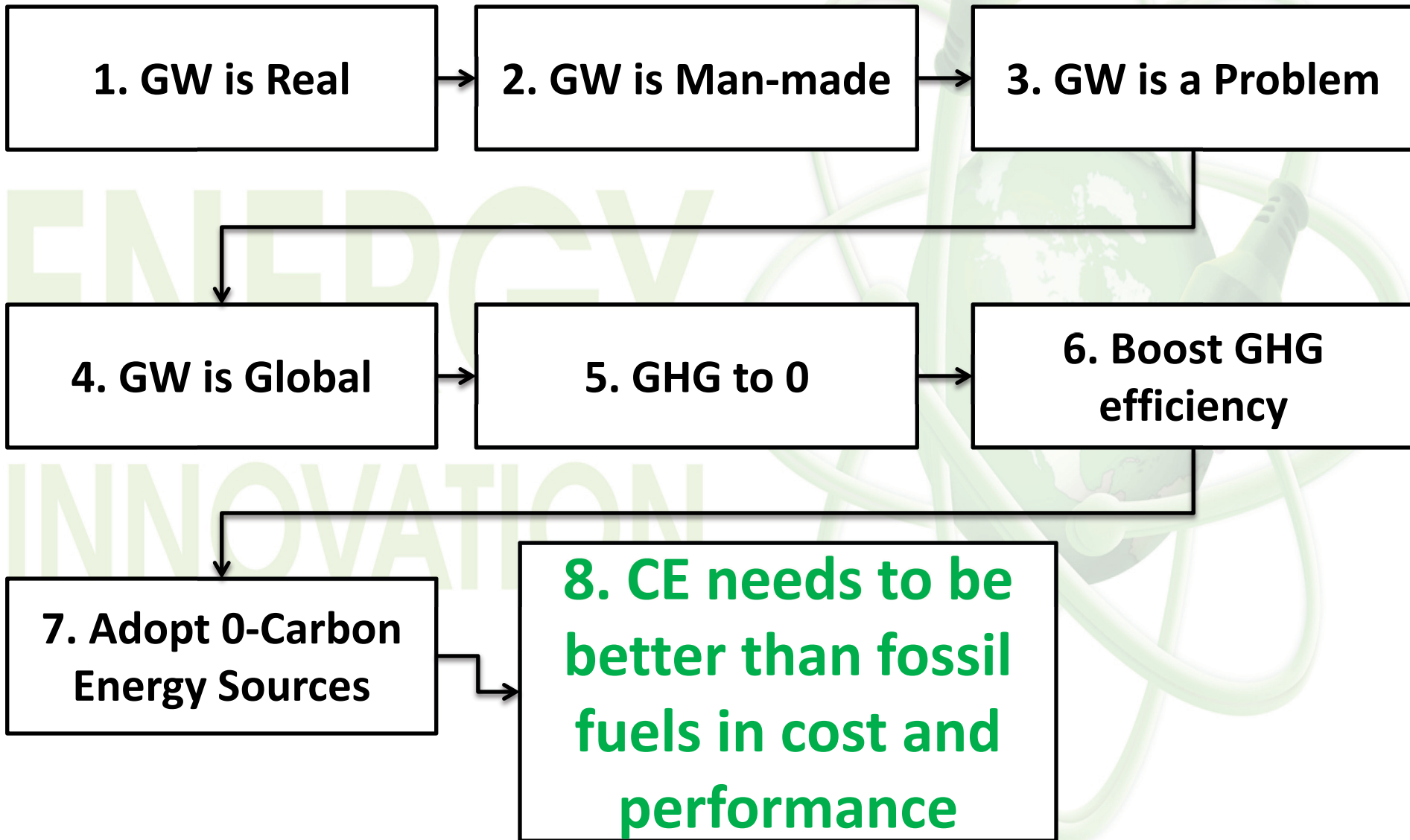
**GHG= Population x Per-capita  
GDP x GHG efficiency**

# ■ Logic Chain to Get to an Effective Global Clean Energy Policy

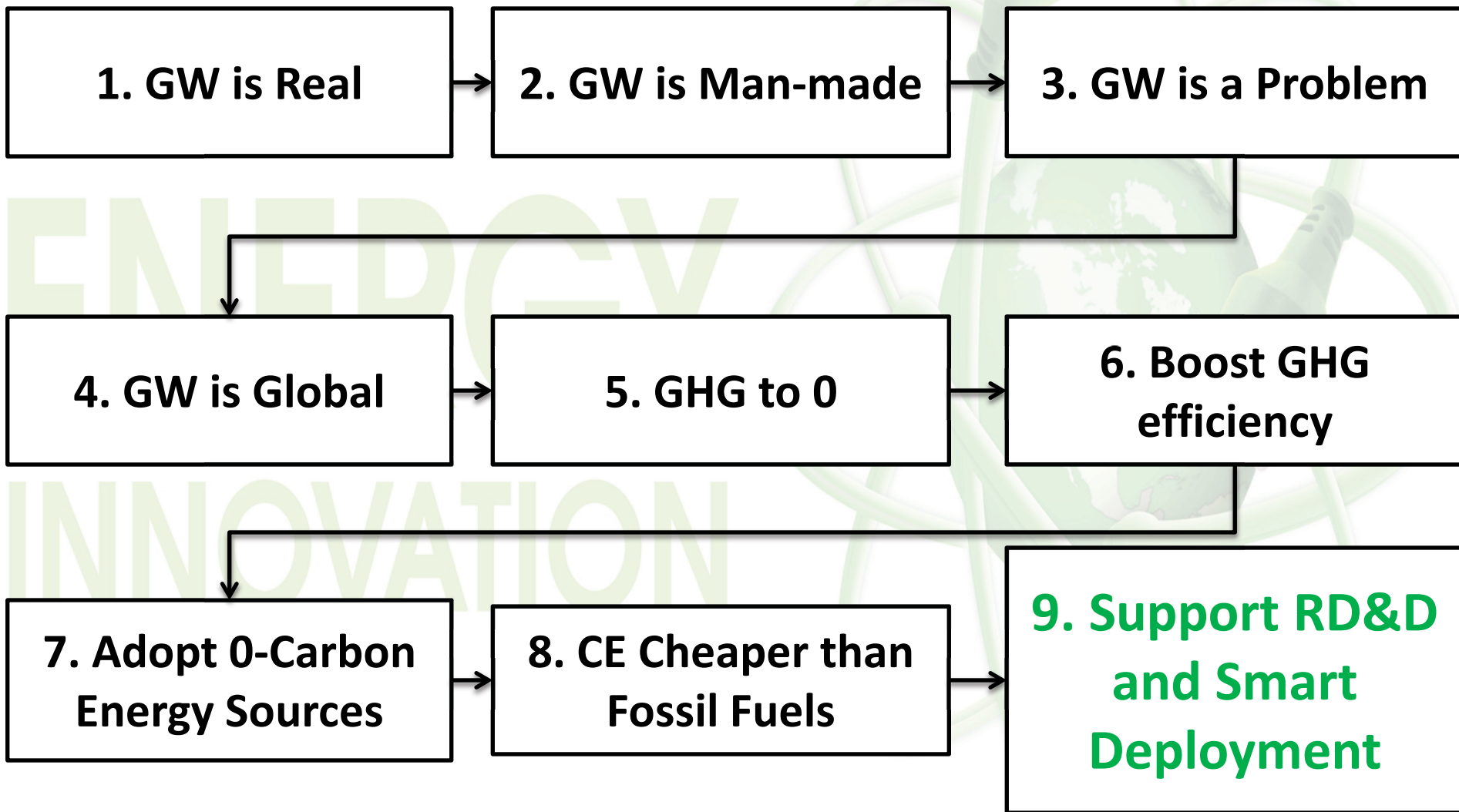




# ■ Logic Chain to Get to an Effective Global Clean Energy Policy



# ■ Logic Chain to Get to an Effective Global Clean Energy Policy



**1. Global Warming  
is Real**

**2. Global Warming is  
Man-made**

**3. Global Warming is  
a Problem**

**4. Global Warming  
is a Global Problem**

**5. Greenhouse  
emissions to ZERO**

**6. Boost efficiency  
and competitiveness**

**7. Adoption of Zero-  
Carbon Energy  
Sources**

**8. Better than Fossil  
Fuels**

**9. Innovation**

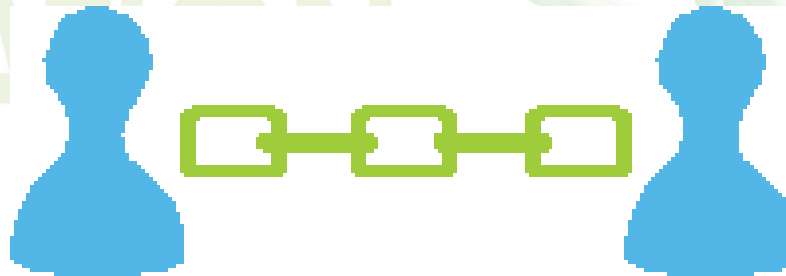
- **Only an active innovation policy based on significantly increased and smarter support globally for RD&D and *smart* deployment will effectively drive energy innovation.**

- **It's time  
to get**

**the logic chain**

**right**

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- Thank You

- **Keep the conversation  
going today using #EI13**

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