

**ROLE OF  
BUILDING  
INDUSTRY**

*“one planet, one people, one environment”*

# Building Sector's Global Impact

Buildings are responsible for  
**40%**  
of world's global greenhouse gas emissions.

Buildings are responsible for  
**40%**  
of solid waste generation globally.

Buildings use  
**12%**  
of the world's water.

Air quality in buildings typically contains up to  
**5x** (and at times greater than 100)  
more pollutants than outdoor air.

Buildings utilize  
**1/3** of  
the world's resources.

# INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 4<sup>TH</sup> ASSESSMENT REPORT (2007) FINDINGS

- IPCC recommendation :

- To avoid 2 °C increase by CO<sub>2</sub> emission reduction:

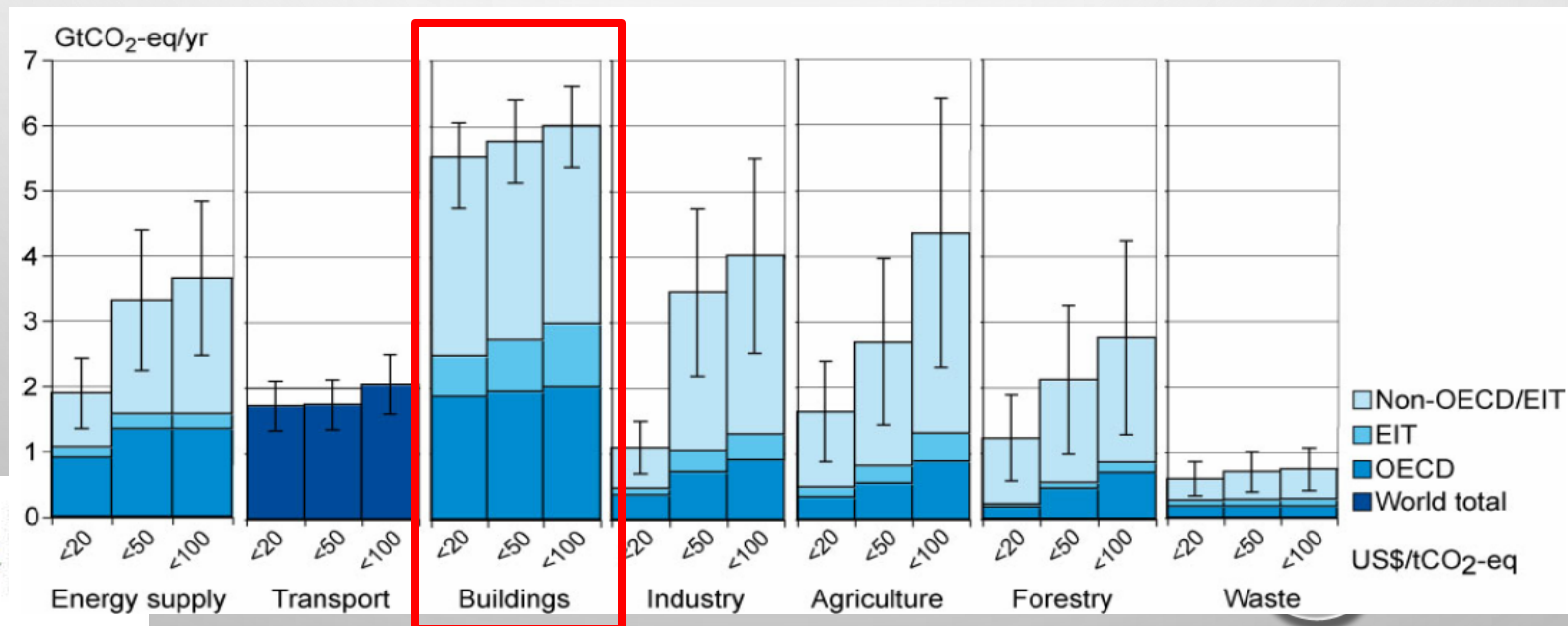
- 40% by 2020

- 80% by 2050

- Building sector has

- greatest potential for CO<sub>2</sub> reduction

- lowest CO<sub>2</sub> reduction implementation cost → cost effective



# BUILDING SECTOR RESPONSIBILITY

CONTRIBUTE ON GLOBAL WARMING



Should play a significant role



*FIGHTING THE CLIMATE CHANGE*



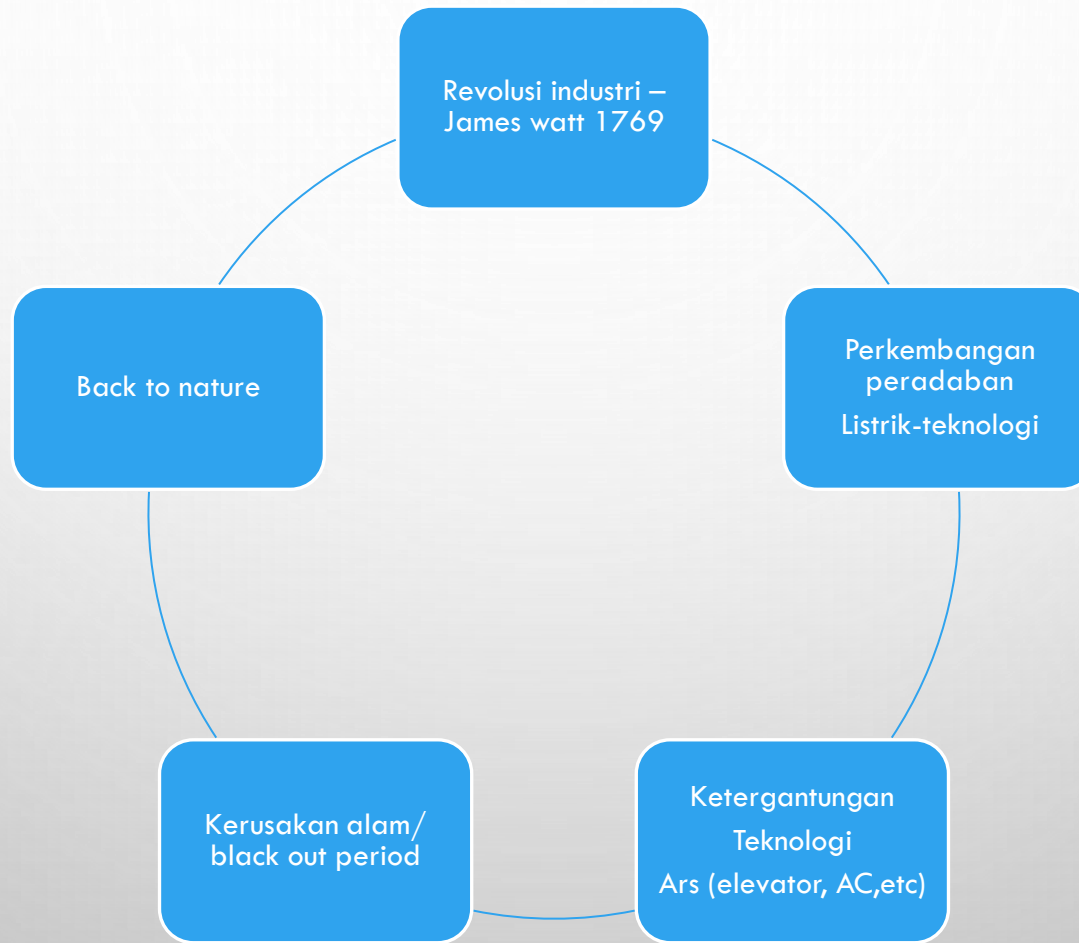
**Green Building**

# PEMAHAMAN ARSITEKTUR SECARA KLASIK- VITRUVIUS

firmitas

utilitas

venustas



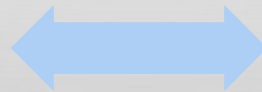
# PARADIGMA BARU DI ARSITEKTUR

Work of art

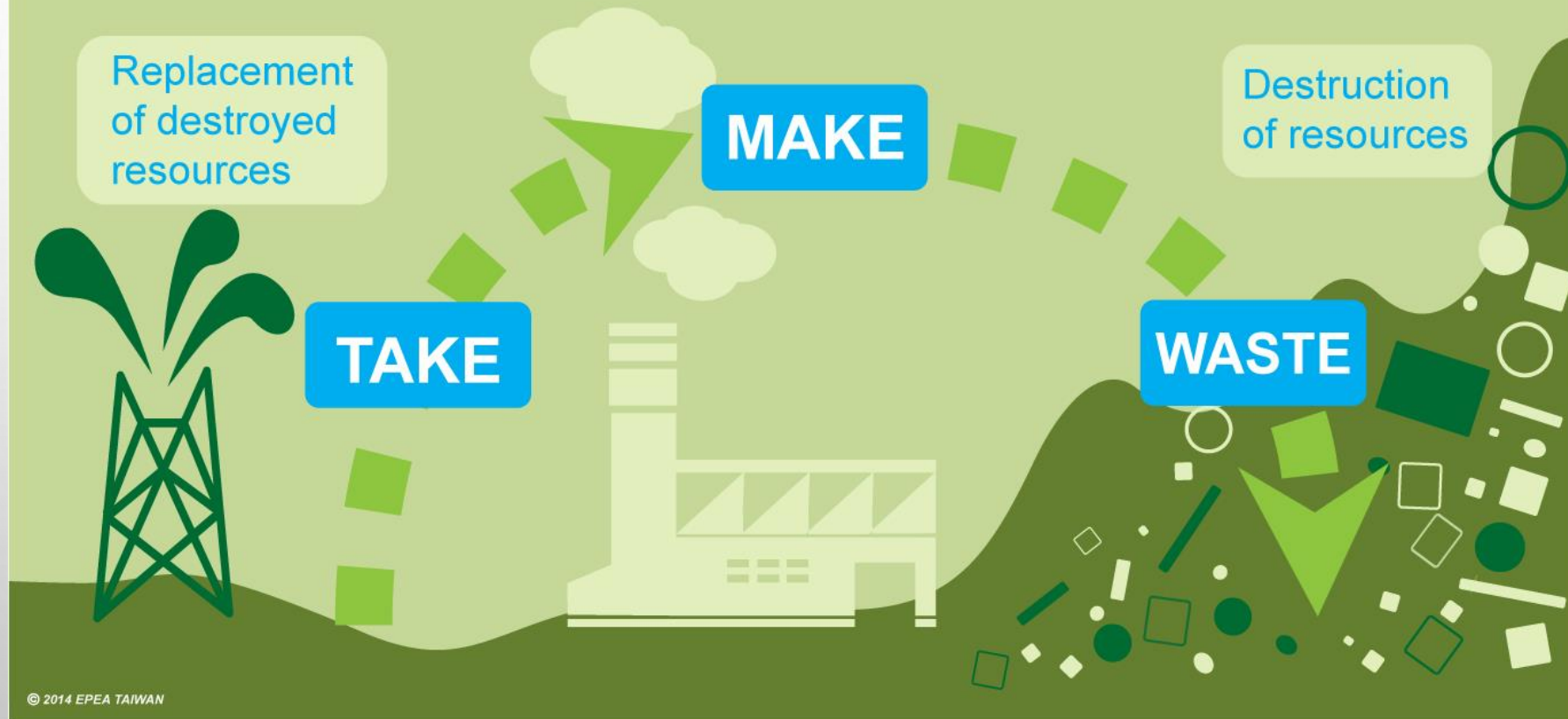


Energy saving

Physical comfort  
(spatial, thermal,  
auditory, visual)

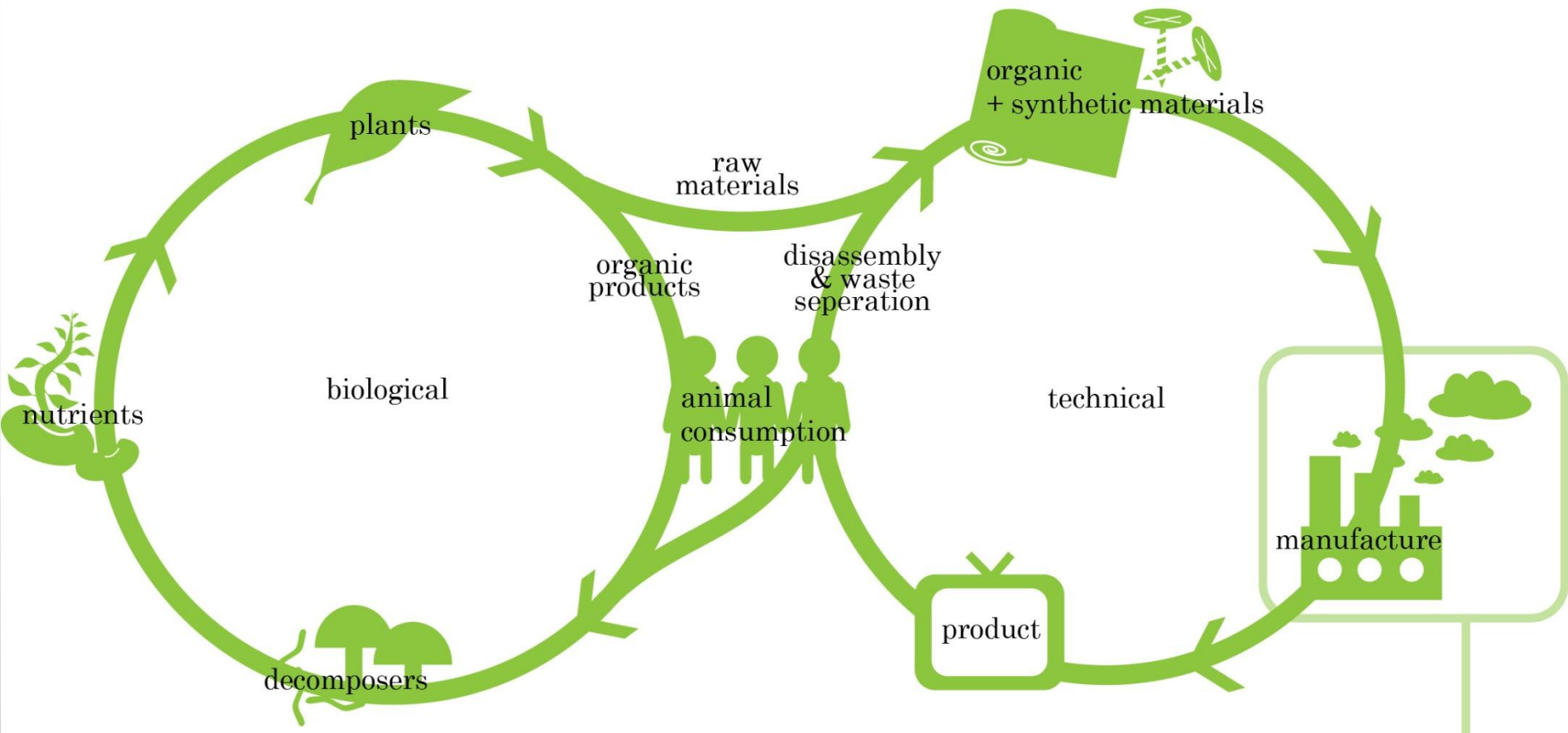


# Cradle To Grave Design Paradigm





# CradletoCradle



- 1 100% Renewable Energy Use
- 2 Water Stewardship clean water output
- 3 Social Responsibility positive impact on community
- 4 Material Reutilization recyclability / compostability
- 5 Material Health impact on human & environmental

5  
criteria