

Lezione 2

The Story of Stuff Project



THE STORY OF
PLASTIC



THE STORY OF
MICROFIBERS

Goal

Sustainable Development

Dimension

Intragenerational Justice

Intergenerational Justice



Elements of Sustainability Development

Sustainability Management

Sustainability Governance

Sustainability Consumption

...

Drivers or Inhibitors of Sustainability Management

Management

Employees

Investors

Customers

Public Authorities

Supply Chain

Pressure Groups

...

Topic 2

Sustainability Foundations



**Have you ever heard
about the IPAT?**

The IPAT Equation

$$I = P \times A \times T$$

emissions # of people $\frac{\text{consumption}}{\text{person}}$ $\frac{\text{emissions}}{\text{consumption}}$

Population

In 2019, the world's population reached 7.7 billion people

By 2100, this figure will be between 9.4 and 12.7 billion people

Affluence

Poorer population tends to consume less resources than the richer population

Wealthiest 10% of the world population are responsible for more than half of the cumulative emissions between 1990 and 2015

Technology

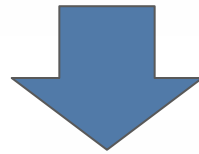
This includes energy needed to make and deliver material flows, multiplied by the environmental impact per unit of energy

Technological advancements can reduce (or increase) environmental impacts

The IPAT Equation

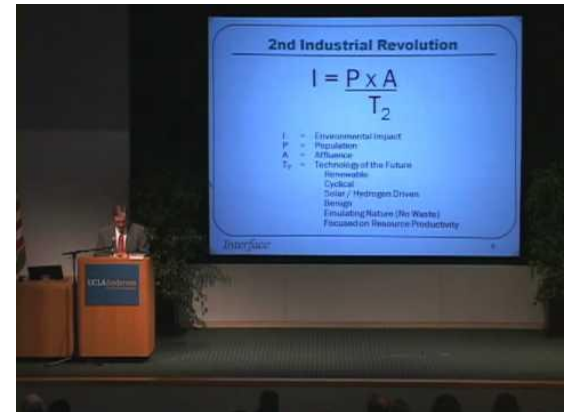
$$I = P \times A \times T$$

emissions # of people $\frac{\text{consumption}}{\text{person}}$ $\frac{\text{emissions}}{\text{consumption}}$



$$I = \frac{P \times A}{T}$$

Ray Anderson & Interface



Weak or Strong?

Weak Sustainability

Keep the total sum of anthropogenic capital and natural capital constant

Focus on:

- Role of Technology
- Resource Effectiveness

Drawback:

Natural capital is fully substitutable with human-made capital?

Non-renewable resources?

Quasi-Sustainability

Do not pass critical levels of consumption

Focus on:

- Identify the “Critical Levels”
- Define the “Tipping Points”

Drawback:

Define new strategies?

What is their technological feasibility?

Strong Sustainability

Live from the interest of natural capital

Focus on:

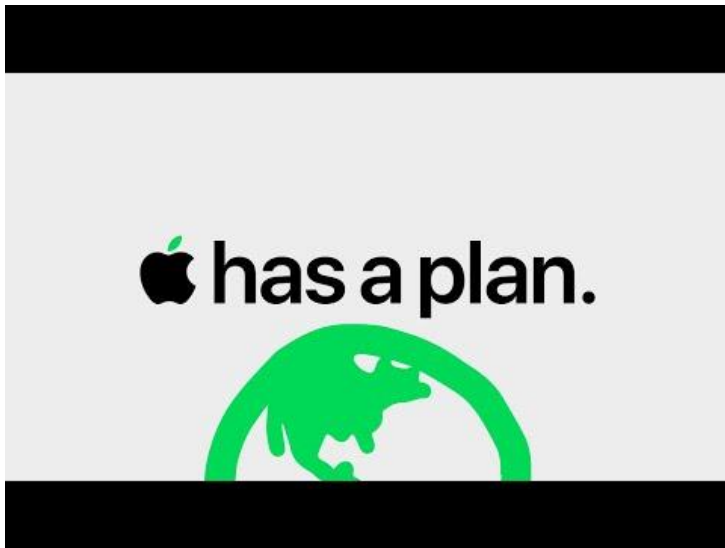
- Individual consumption
- Renewable resources

Drawback:

Does the “people” agree with the reduce life standard?

No growth?

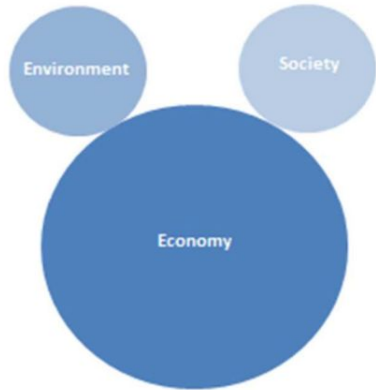
An Example: Levi's vs Apple



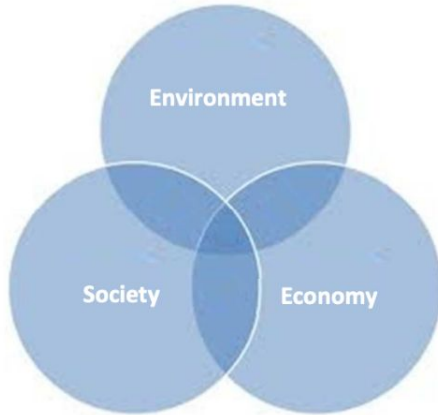
Planet - People - Profit



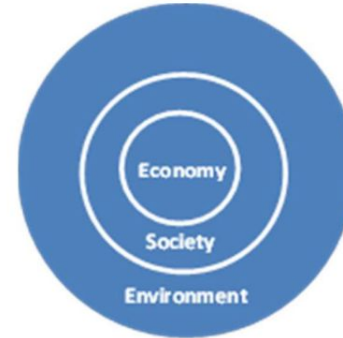
I modelli per la rappresentazione della sostenibilità



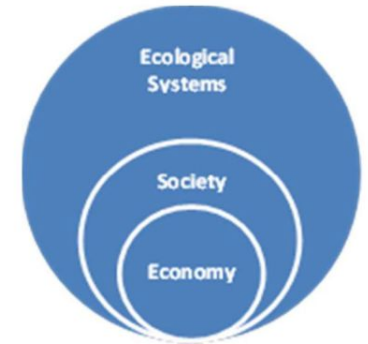
***Mickey Mouse Model**
(economic primacy flanked by
'heeding' offshoots)



Three Pillars Model
(convergence represents
'sustainability space')



Three Nested Ring Model
(componential, 'Russian Doll'
cored/anchored by economy)



Nested Dependencies Model
(ecologically-bounded
hierarchy ordered)