

Report on National Standards

Dr Matthew Realf

School of Chemical and Biomolecular Engineering

Georgia Institute of Technology

Currently at:

The National Science Foundation



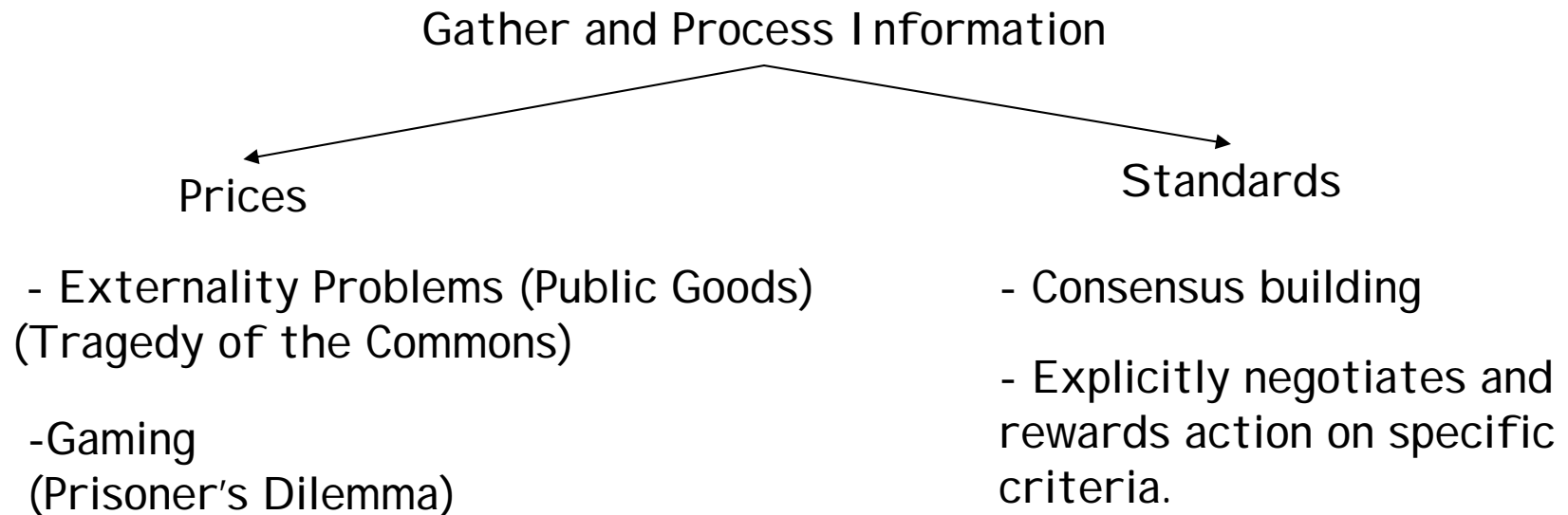
National Science Foundation

WHERE DISCOVERIES BEGIN

Framework for Action - Standards

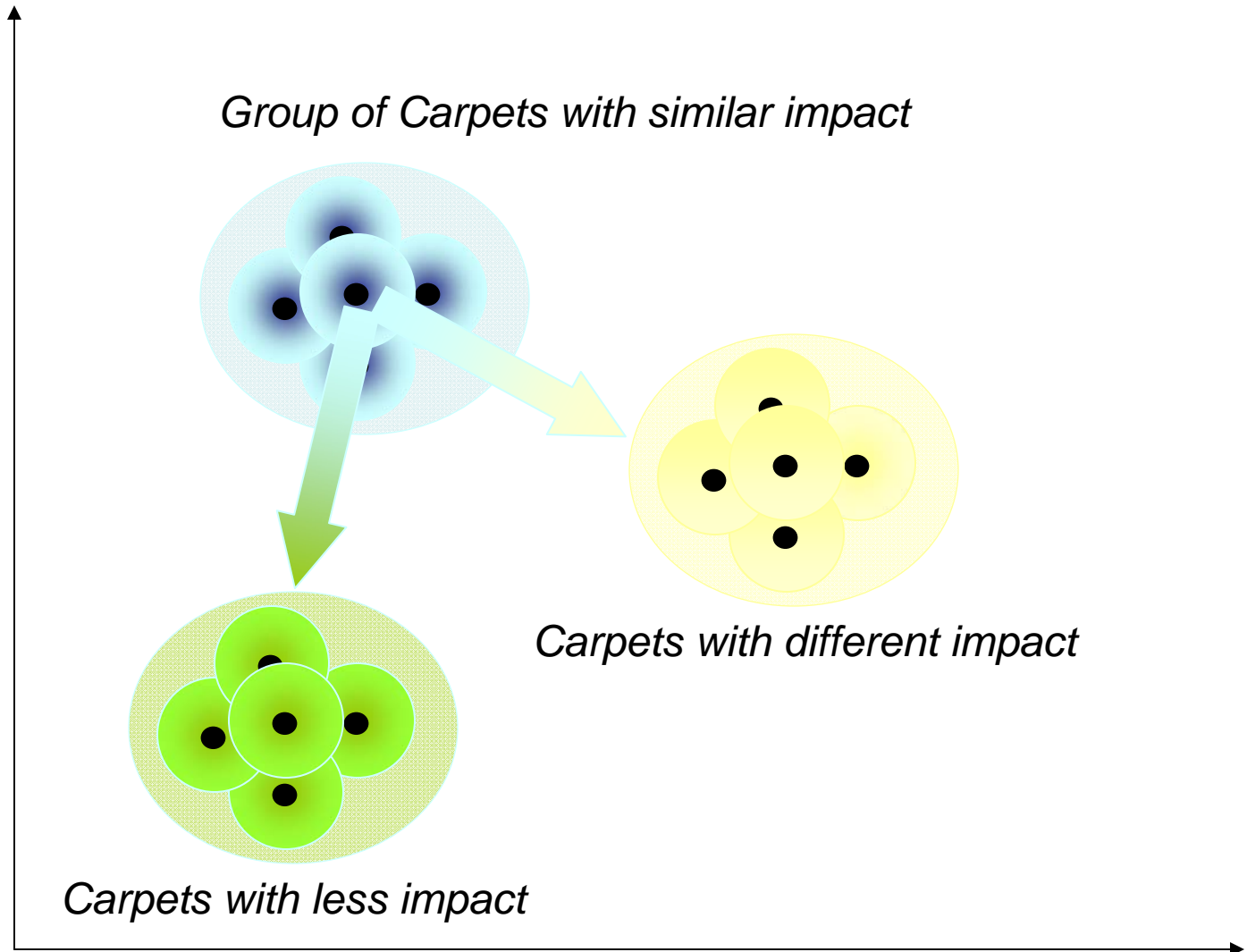
"If we started thinking about every transaction we make, we would soon be reduced to paralysis."

Simon Upton, Former Chair OECD Roundtable on Sustainable Development



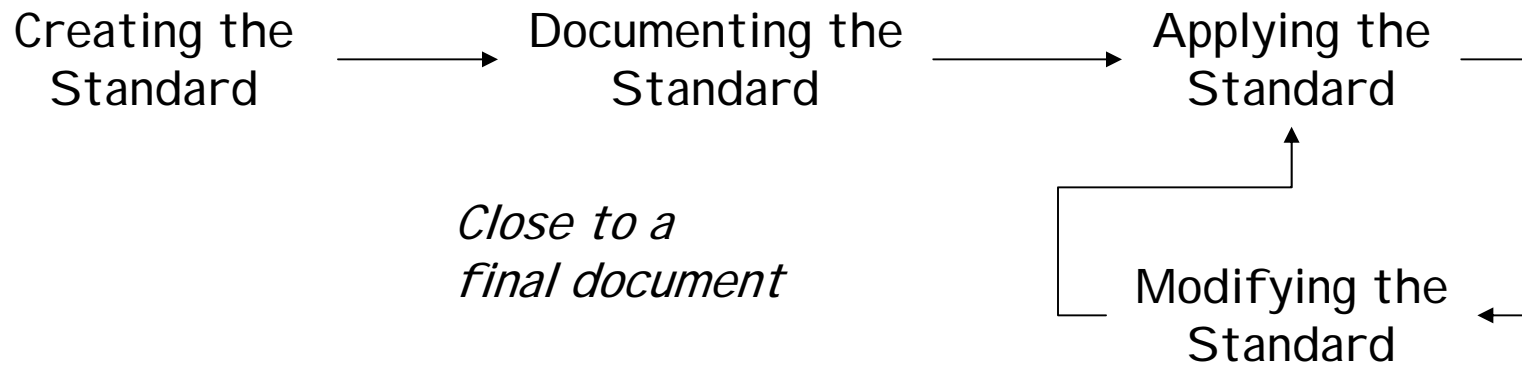
Overall Objective in Rationalization of Comparisons

Life Cycle Indicator 2



Life Cycle Indicator 1

Life Cycle of Standards



Question to ask about the process

How transparent is the standards creation process?

How transparent is the standards document?

How transparent is applying the standard?

↓
NSFi ANSI accredited standards developer

NSFi Standard

- Points Based system
- Reduces informational load by categorizing carpet into “LEED like” metals of increasing nobility.

Points spread across

- Public Health & Environment
- Renewable Energy & Energy Efficiency
- Biobased or Recycled Materials**
- Manufacturing
- Reclamation & End of Life Management**
- Innovation**

Points Influenced by reclamation recycling

- **Product Reclamation**

The act or process of recovering a product at the end of its useful life for the purpose of recycling

25-30 Points

Based on achieving increasing % levels of reclamation

- **Recycled or Biobased Content**

22 Points

Based on achieving increasing levels of recycled content

- **Innovation**

5-10 Points

Based on reducing mass or energy in the product or other innovative strategies for reducing impact

NSFi Standard

- Total Points

120–130 Points

Approximately 1/3rd of the points reclamation and recycling based

Nobility	Points
Bronze	>27
Silver	>36
Gold	>51
Platinum	>70

Hard to achieve Gold or higher without substantial reclamation and recycling or biobased elements

Summary

- Standards help focus attention on specific product performance categories.
- NSFi Carpet Standard has significant weight on End-of-Life.
- Opportunity for reclamation recycling and manufacturing industries to collaborate to achieve higher levels of standard.