



Operations Strategy for Sustainability (2020 update)


Panuwong Kumpirarusk, Ph.D.

Operations Management

Thammasat Business School

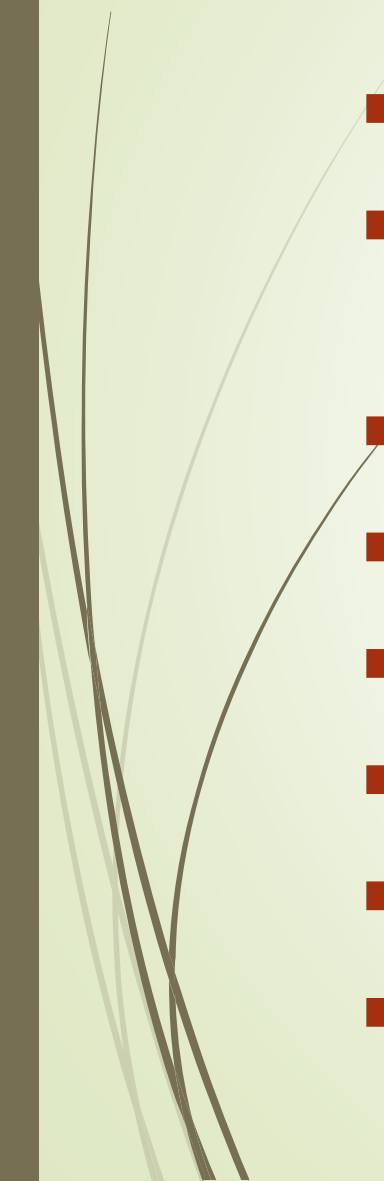


Topics

- Global Issues on Sustainability
 - Sustainability & Triple Bottom Line
 - Business Sustainability Movements
- 



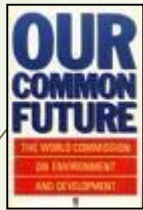
Global Issues on Sustainability

- Unbalanced developments
 - Climate change and global warming
 - Food insecurity
 - Energy insecurity
 - Biodiversity loss
 - Covid-19
 - PM2.5
 - Etc.
- 

Definitions of Sustainability

Sustainable Development (SD)

Meeting the needs of the present generation without compromising the ability of future generations




to meet their own needs

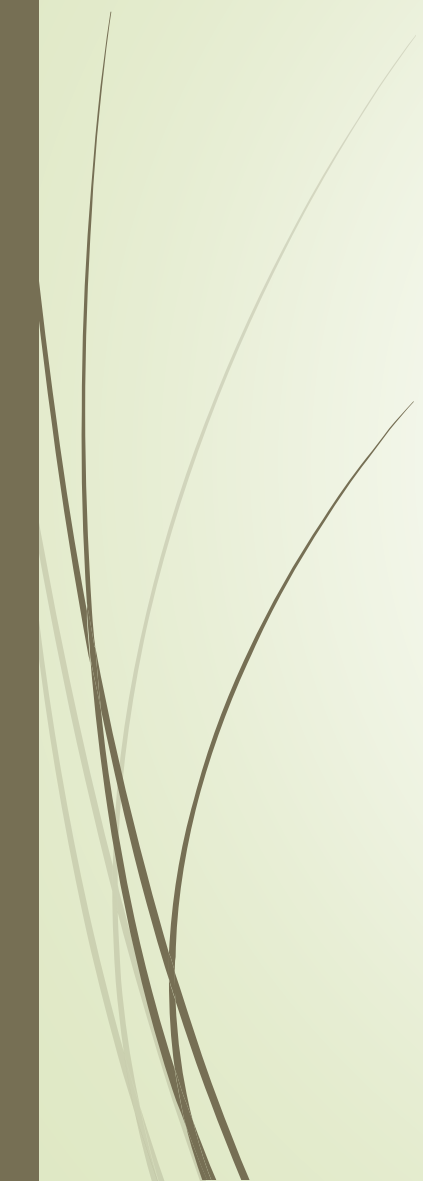
-- Brundtland Commission, 1987 --

(Eco-)Systems Thinking

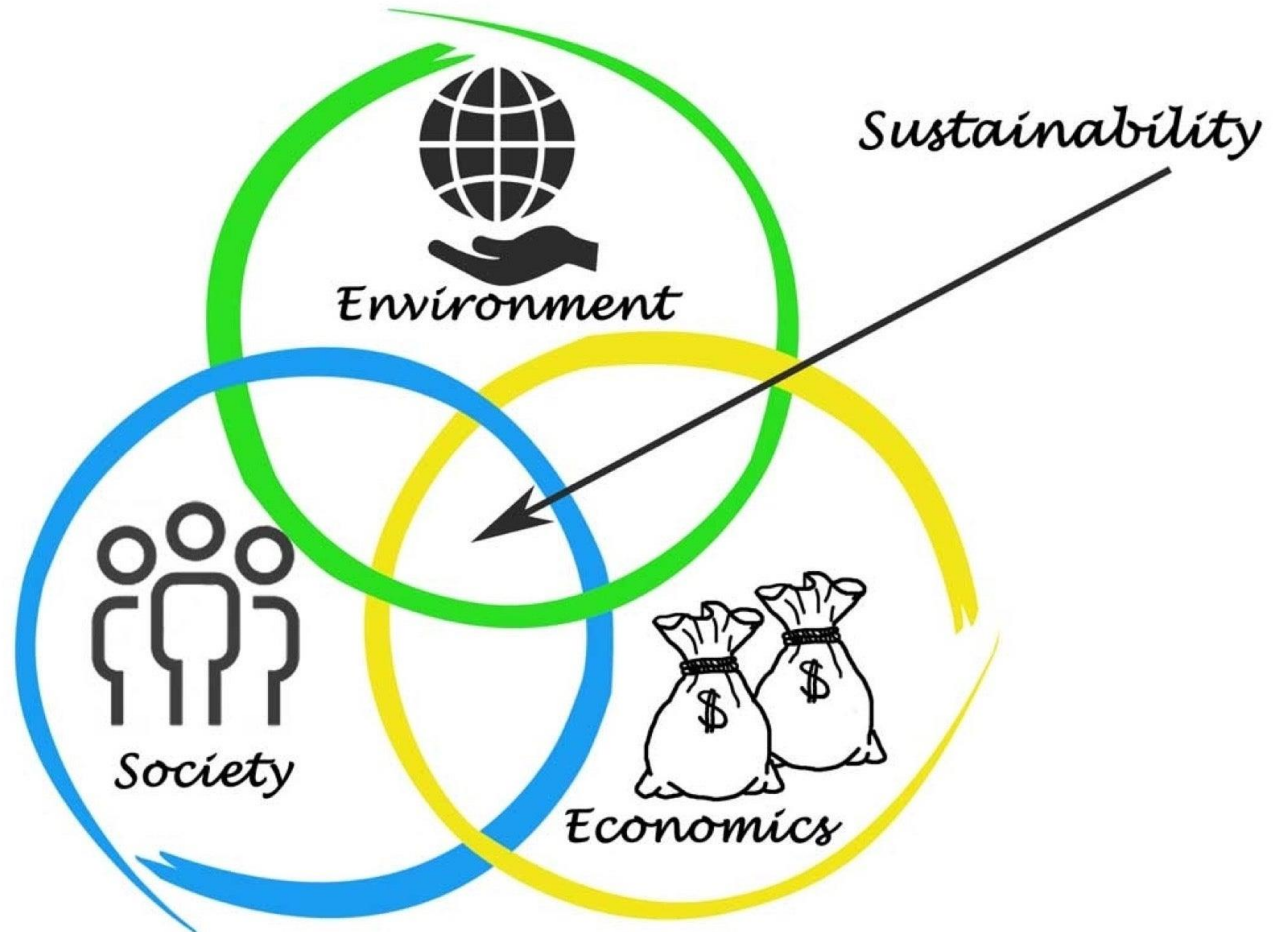
Carrying capacity of the planet to absorb waste and support life



What is Triple Bottom Line: TBL or 3BL

- ▶ An expanded spectrum of values and criteria for measuring organizational and societal success – economic, environmental, social.
 - ▶ In the private sector, a commitment to Corporate Social Responsibility (CSR) implies a commitment to some form of TBL reporting.
- 

The Triple Bottom Line is made up of
"Social, Economic and Environmental"
"People, Planet, Profit "





The 2030 Agenda

THE 2030 AGENDA IS THE PLAN OF ACTION FOR PEOPLE, PLANET AND PROSPERITY (PPP)

It aims to transform our world and to improve people's lives and prosperity on a healthy planet. It applies to all countries through partnerships and peace. Countries, regions, cities, the business sector and civil society are actively engaged in implementing the Agenda and the SDGs. They are mobilizing efforts to end all forms of poverty, fighting inequalities and tackling climate change, while ensuring that no one is left behind. The summit will be a space to discuss the huge efforts that are being made and to identify future actions for accelerating progress towards the SDGs.

SUSTAINABLE DEVELOPMENT GOALS



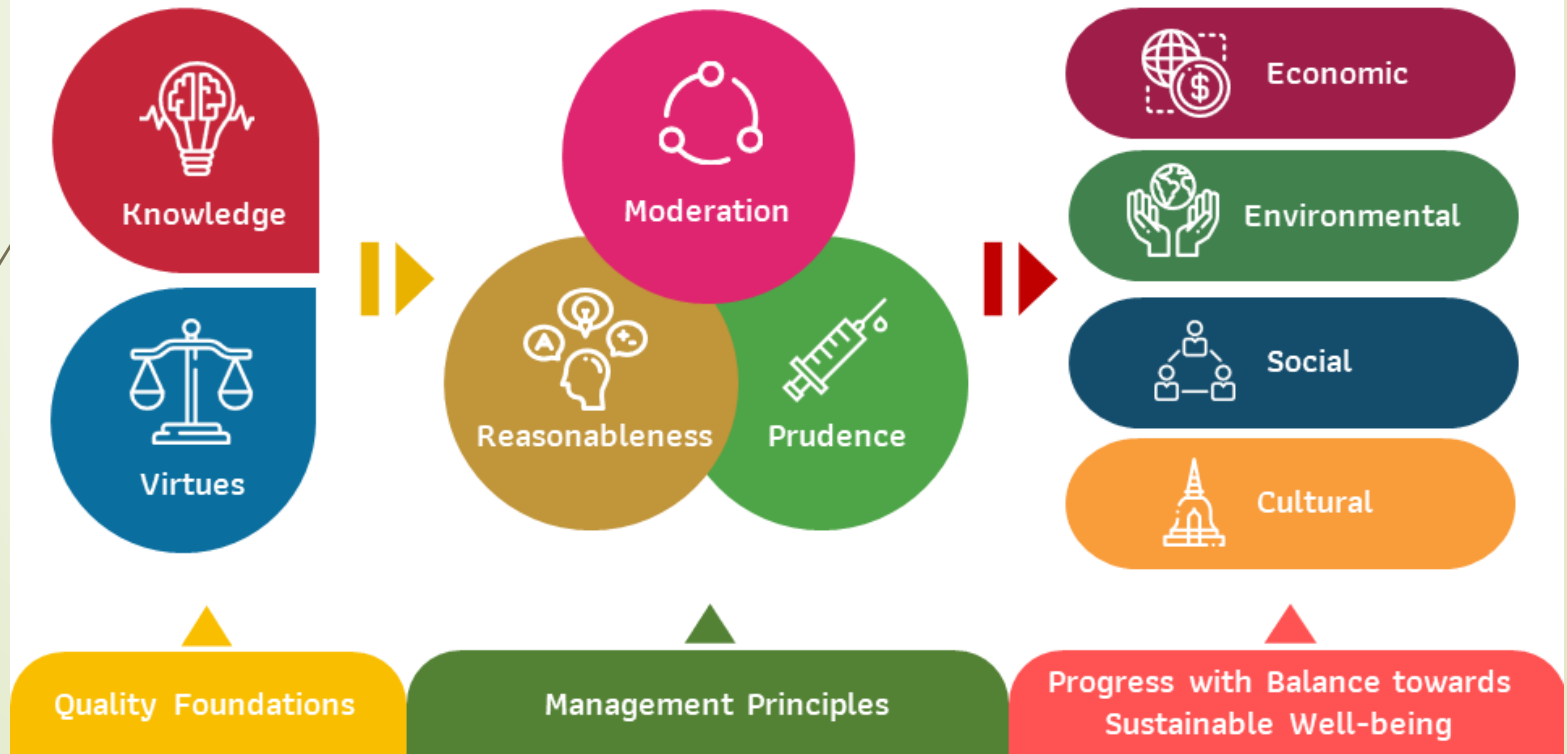
For more information: <https://sdgs.un.org/goals>

Sufficiency Economy Philosophy (SEP)



Sufficiency for Sustainability

Sufficiency Economy Philosophy for Sustainable Development Goals



Sufficiency Economy Philosophy (SEP)

Localisation of the SDGs

Since the 1997 Asian financial crisis, the [Sufficiency Economy Philosophy](#) (SEP) has been a key guiding principle of Thailand's sustainable development efforts. The philosophy stresses balance in the use of economic, social, environmental and cultural capital. The SEP is based on three principles that stress a middle path for Thai people at all levels, from family to community to country. These principles are:

•Moderation

In 1998, the King elaborated on the meaning of moderation:

"Sufficiency is moderation ... Being moderate does not mean being too strictly frugal; consumption of luxurious items is permissible ... but should be moderate according to one's means."

— Royal Speech, given at Dusit Palace, 4 December 1998.

In Thailand, moderation will be an important principle for achieving the SDG targets such as less wasteful consumption and production patterns ([SDG 12](#)), the curbing of fossil fuel usage ([SDG 7](#)), and sustainable management of marine ([SDG 14](#)) and terrestrial ([SDG 15](#)) ecosystems.

•Reasonableness

Reasonableness refers to thoughtful consideration of the impact that our actions and decisions may have both on others and the world around us. Considering the SDGs, reasonableness has numerous practical applications in global issues of climate change ([SDG 13](#)), equality (SDG 10), justice (SDG 16), developing clean energy sources ([SDG 7](#)) and reducing pollution ([SDG 12](#)).

•Prudence

Prudence is about assessing potential risks, working methodically and achieving a level of competence and self-reliance before proceeding further. It is also about people taking care not to overreach their capabilities. This principle may apply to almost all of the SDGs including health (SDG 3), food (SDG 2), water ([SDG 6](#)) and energy security ([SDG 7](#)) in particular.

Business sustainability movements

1. Recycling
2. Waste minimization
3. Cleaner production (CP)
4. Zero emission
5. Zero growth, décroissance
6. Green economy
7. Triple-bottom-line (3P)
8. Life cycle assessment (LCA)
9. Sustainable consumption
10. Corporate social responsibility (CSR)
11. Blue economy
12. Creating shared value (CSV)
13. Industrial ecology
14. Sharing economy
15. CIRCULAR ECONOMY

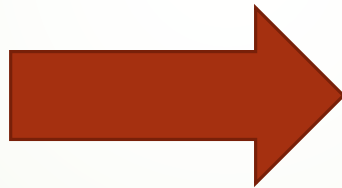


Life Cycle Management (LCM)

Life cycle thinking expands pollution prevention to include the complete product life cycle and sustainability. Source reduction in a product life cycle perspective is then equivalent to eco-design principles and what had been called the "6RE philosophy":

3R's

- Reduce
- Reuse
- Recycle



6R's

- Recover
- Reuse
- Recycle
- Redesign
- Reduce
- Remanufacturing

3R Policies by METI, Japan

Reduce:

Reducing the amount of waste by increasing the efficiency of resource use and extending the useful life of products.

Reuse:

Using the "recyclable resources" from used items again, as products or parts, after giving them proper treatment. ("Recyclable resources" are the useful parts or components of waste, used products and byproducts.)

Recycle:

Using the "recyclable resources" as the raw materials to make new products.

Source: <https://www.meti.go.jp/policy/recycle/main/english/index.html>

3R Policies by METI, Japan

Promoting the 3Rs based on Extended Producer Responsibility

Addressing Difficult-to-Dispose Items

Promoting Recycling by Special Measures under the Waste Disposal and Public Cleansing Law

Establishing Quantitative Targets Using the 3Rs at the Design and Manufacturing Stages

Strategies for Imported Products

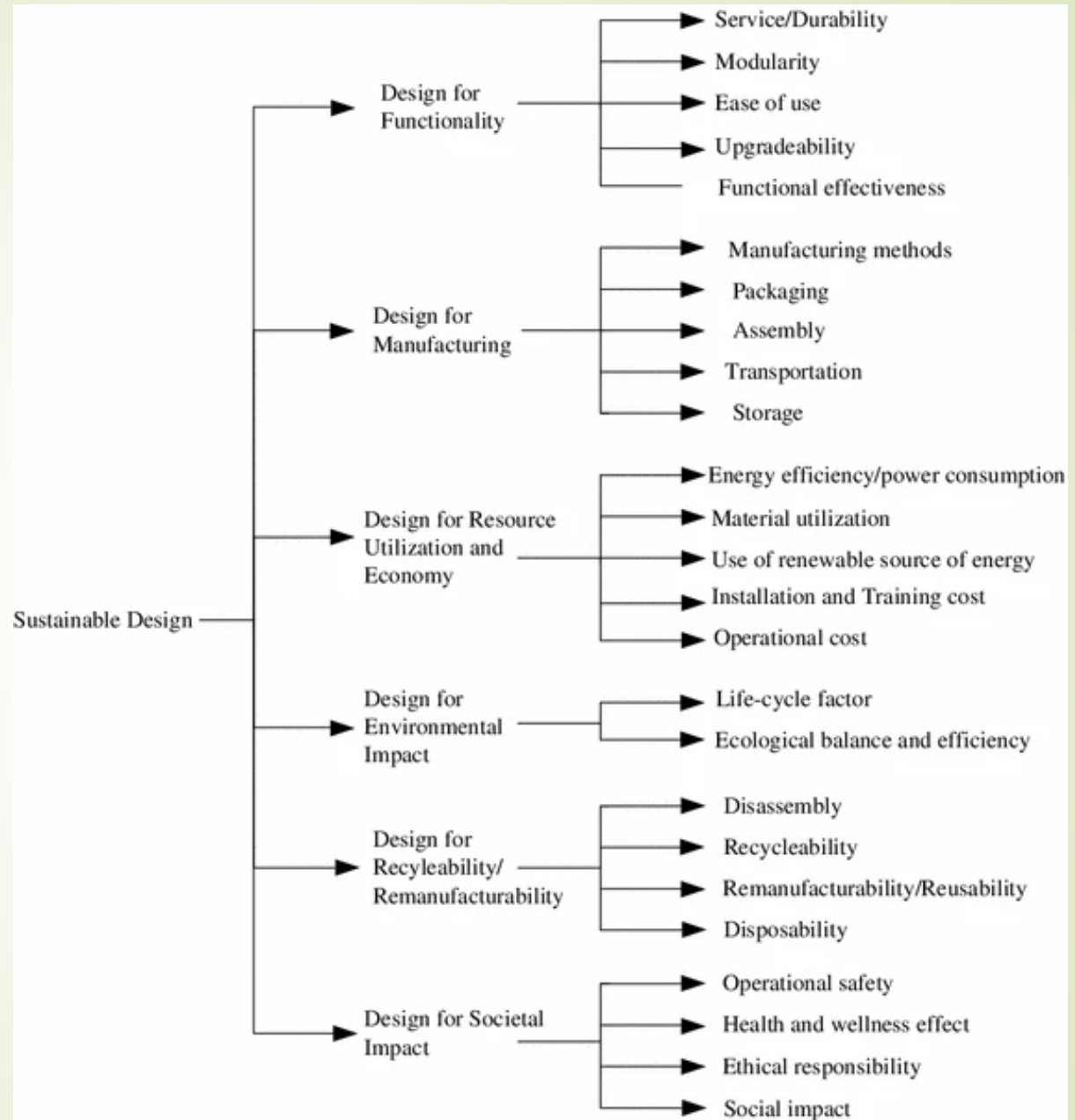
Strategic Use of Standards for the 3Rs

Create Local Resource-Recycling Systems

Source: https://www.meti.go.jp/policy/recycle/main/english/3r_policy/keyissues.html

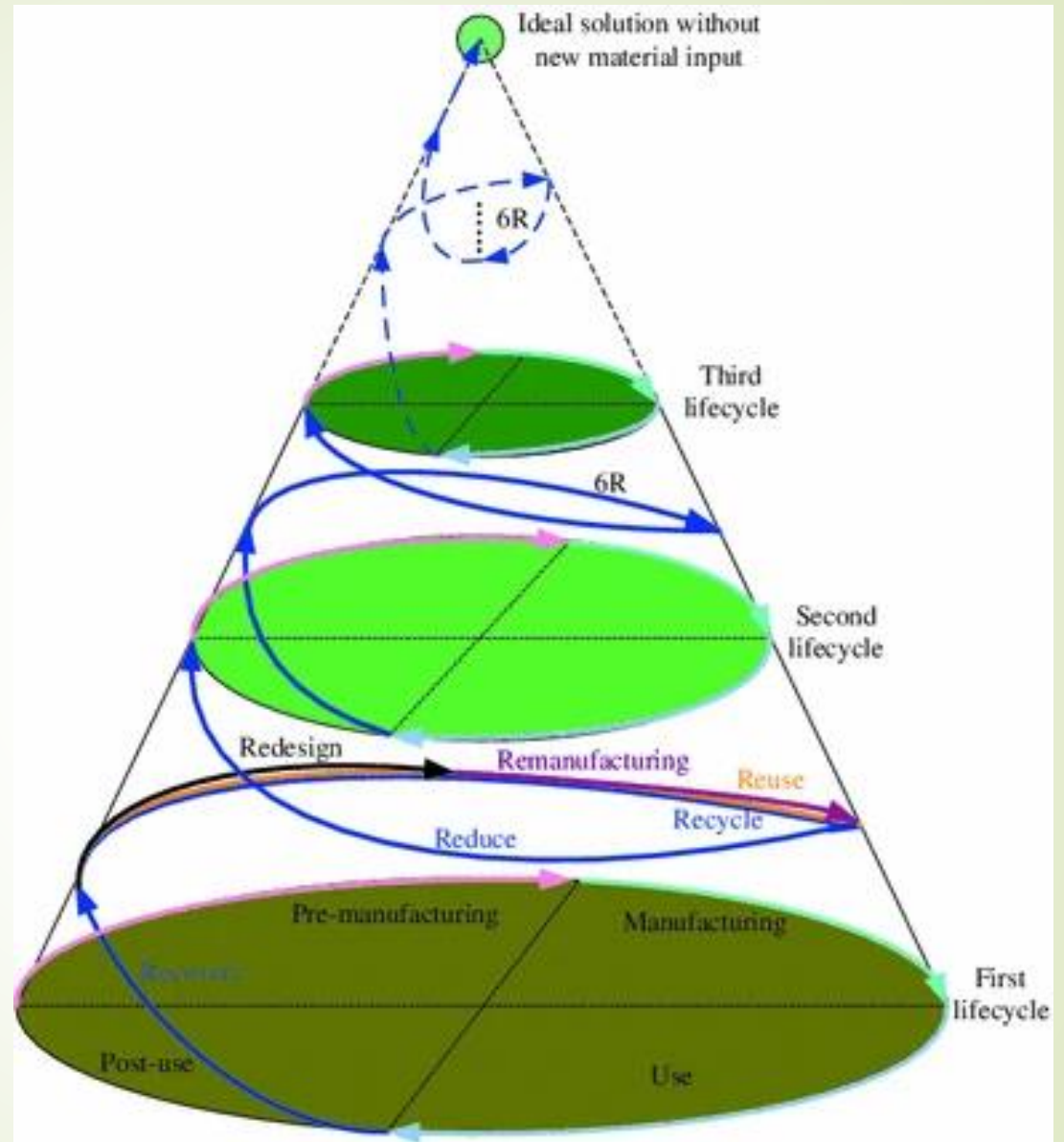
6R

The contents of sustainable design (Jawahir 2005)



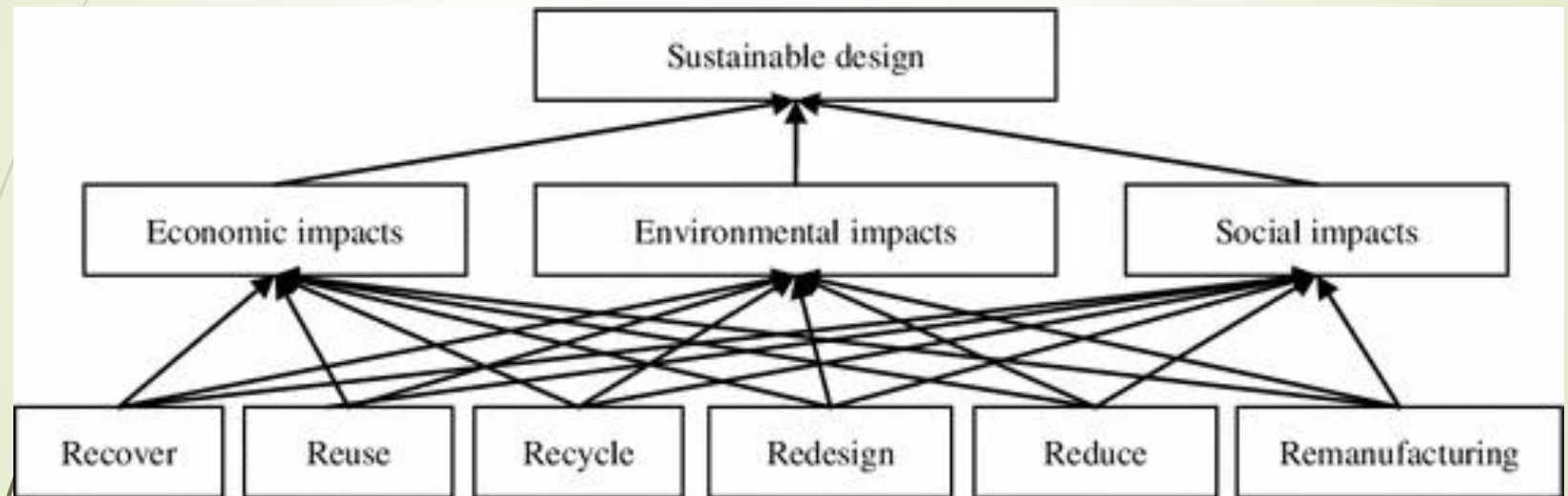
6R

6R concept for closed-loop of multiple life cycles



6R

The impact of 6R concept to sustainable design



(Corporate) Social Responsibility

ISO 26000: Social responsibility

Social Responsibility (SR) is the responsibility of an organization for the impacts of its decisions and activities on the society and the environment through transparent and ethical behavior that:

- Contributes to sustainable development, including the health and welfare of society
- Takes into account the expectations of stakeholders
- Is in compliance with applicable laws and consistent with international norms of behavior, and
- Is integrated throughout the organization and practiced in its relationships.

ISO 26000: Social Responsibility

- ▶ International Standardization Organization (ISO) is the world's largest developer of voluntary International Standards, used by businesses and other organizations; its members are national standards bodies. Thai Industrial Standards Institute (TISI) represents Thailand in ISO.
- ▶ ISO 26000 is an International Standard giving guidance/recommendations about how any organization can improve its Social Responsibility and thus contribute to sustainable environmental, social and economic development.
- ▶ ISO 26000 is not certifiable, as it does not contain requirements. Its appeal is to those who, for whatever reasons, seek to improve their operating processes and impacts through socially responsible behavior.




What makes ISO 26000 important and credible?

- It is designed to work in all organizational and cultural contexts – in any country or region.
- It is flexible and the user decides how to use it.
- It was internationally negotiated through ISO's consensus method, using a multi-stakeholder approach, and balance to reflect global diversity.
- It incorporates the real-life experiences of its many contributors, and at the same time builds on international norms and agreements related to Social Responsibility.

Examples of linkages between International norms and ISO 26000





What does ISO 26000 offer to its users?

- Guidance and recommendations on how to structure, evaluate, and improve their social responsibility, including stakeholder relationships and community impacts.
- Provides organizations with a set of societal expectations of what constitutes responsible behavior, based on authoritative international instruments

core content of ISO 26000

- Seven principles
- Seven core subjects and their related issues
- Stakeholder engagement

HOW TO USE ISO 26000

- ✓ Setting the direction from the top; building Social Responsibility into governance and procedures
- ✓ Determining relevance and significance; establishing priorities: matrix, mapping, gap analysis
- ✓ Assessing your responsibilities in your sphere of influence
- ✓ Performing “due diligence”
- ✓ Reporting and other communications with stakeholders

SEVEN PRINCIPLES OF ISO 26000

- ✓ Accountability
- ✓ Transparency
- ✓ Ethical behavior
- ✓ Respect for stakeholder interests
- ✓ Respect for the rule of law
- ✓ Respect for international norms of behavior
- ✓ Respect for human rights

Complete list of Issues for all of the 7 Core Subjects

Each issue has a definition and description, followed by a list of related actions and expectations

1. Organizational governance

- Issue 1: Decision-making processes and structure

2. Human rights

- Issue 1: Due diligence
- Issue 2: Human rights risk situations
- Issue 3: Avoidance of complicity
- Issue 4: Resolving grievances
- Issue 5: Discrimination and vulnerable groups
- Issue 6: Civil and political rights
- Issue 7: Economic, social and cultural rights
- Issue 8: Fundamental principles and rights at work

3. Labour practices

- Issue 1: Employment and employment relationships
- Issue 2: Conditions of work and social protection
- Issue 3: Social dialogue
- Issue 4: Health and safety at work
- Issue 5: Human development and training in the workplace

4. The environment

- Issue 1: Prevention of pollution
- Issue 2: Sustainable resource use
- Issue 3: Climate change mitigation and adaptation
- Issue 4: Protection of the environment, biodiversity and restoration of natural habitats

Complete list of Issues for all of the 7 Core Subjects, continued

5. Fair operating practices

- Issue 1: Anti-corruption
- Issue 2: Responsible political involvement
- Issue 3: Fair competition
- Issue 4: Promoting social responsibility in the value chain
- Issue 5: Respect for property rights

6. Consumer issues

- Issue 1: Fair marketing, factual and unbiased information and fair contractual practices
- Issue 2: Protecting consumers' health and safety
- Issue 3: Sustainable consumption
- Issue 4: Consumer service, support, and complaint and dispute resolution

Consumer issues, continued

- Issue 5: Consumer data protection and privacy
- Issue 6: Access to essential services
- Issue 7: Education and awareness

7. Community involvement and development

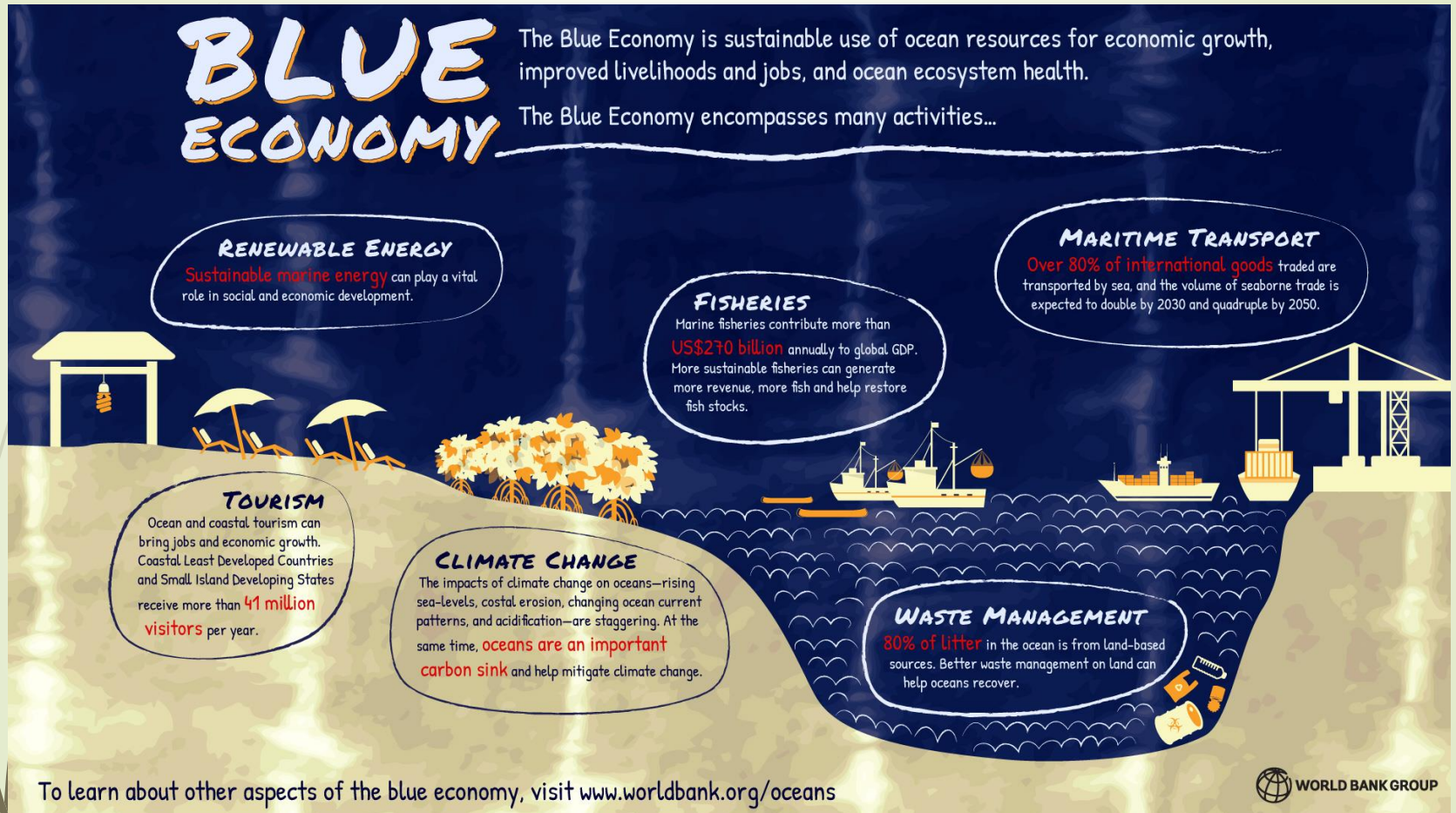
- Issue 1: Community involvement
- Issue 2: Education and culture
- Issue 3: Employment creation and skills development
- Issue 4: Technology development and access
- Issue 5: Wealth and income creation
- Issue 6: Health
- Issue 7: Social investment

Relavant Issue - Green Economy

A green economy is defined as low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services.

Source: UNEP

Relavant Issue - Green Economy



Source: World Bank Group

Relevant Issue - Sharing Economy

The sharing economy is also known as the collaborative economy. It is based on pooling and exchanging services, resources, goods, time, knowledge and skills.

- Provisioning Goods and Resources : Airbnb
- Exchanging Services and Skills' Pooling : co-working space - having a variety of freelancers, medium-small companies or civil society organizations working under the same roof it gets easier to exchange skills.
- Crowdfunding : allows individuals to support the realization of someone else's project by doing a financial contribution, pre-purchasing a product or investing capital.

Relavant Issue - Circular Economy

A circular economy is an industrial system that is restorative or regenerative by intention and design. It replaces the end-of-life concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse and return to the biosphere, and aims for the elimination of waste through the superior design of materials, products, systems, and business models.

Source: World Economic Forum

Relevant Issue - Business Initiatives



Environmental Stewardship

- Reduction of Energy and Water consumption.
- Purchase renewable energy.
- Recycling & Reusable Cups.



Corporate Social Responsibility



Ethical Sourcing

- Coffee Purchasing
- Farmer Support Loans

Community

- Community Service.
- Coffee & Tea growing communities.
- Youth Actions Grands.