

Sustainable Business

Sustainable Business

UN Global Compact

- UN initiative to encourage **businesses all over the world to adopt sustainable policies** and to report on the implementation of these policies.
- Kofi Annan's address to the World Economic Forum on January 31, 1999.
- a “strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of **human rights, labour, environment, and anti-corruption**”

Human Rights

- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2: make sure that they are not complicit in human rights abuses.

Labour

- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4: the elimination of all forms of forced and compulsory labour;
- Principle 5: the effective abolition of child labour; and
- Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

- Principle 7: Businesses should support a precautionary approach to environmental challenges;
- Principle 8: undertake initiatives to promote greater environmental responsibility; and
- Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

- Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Fig. 2 Principles of the UN Global Compact framework (Source: United National Global Compact 2012)

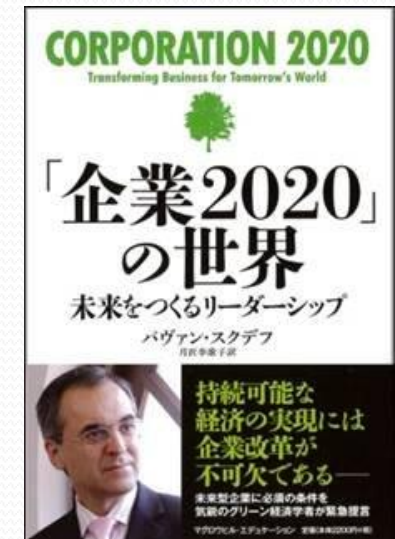
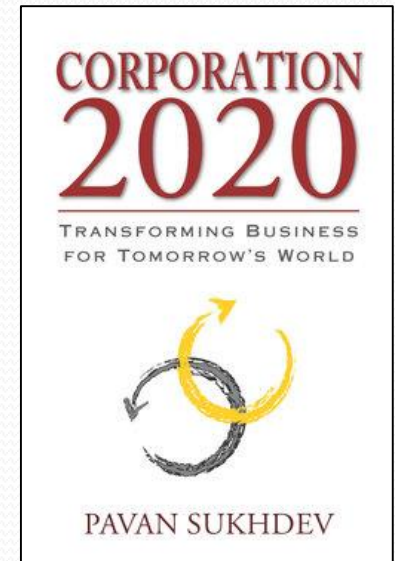
Green jobs - ILO

- Socially fair transition towards green, decent jobs
- Reduce consumption of energy and raw materials
- Limit greenhouse gas emissions
- Minimize waste and pollution
- Protect and restore ecosystems

Corporate 2020

Corporate 2020 (<http://www.corp2020.com/>)

- "Corporation 2020" is the firm of the future - it creates private profits without creating public losses.
- Today's dominant business model, "Corporation 1920" delivers private profits along with public losses and drives us into danger zones close to Planetary Boundaries.
- The private sector today delivers most of the economy - its GDP and its jobs. To get sustainable development, we need an inclusive green economy, and to get such an economy, we must change the way the economy's main agent - the corporation - does business."



Corporate 2020

- The Old Model: Corp₁₉₂₀
 - “cost-externalizer.”
- The four characteristics of a Corp₂₀₂₀
 - **Goal Alignment :**
“a business that makes nothing but money is a poor business.” (Henry Ford)
 - **Community :**
The communities that evolve within corporations are an important form of “social capital”
 - **Institute :**
By investing in “human capital”, a business can be extremely profitable while producing a large public benefit
 - **Capital Factory :**
Corporations must create financial capital through their operations, but without depleting other forms of capital

Corporation 2020:

How do we do that?

- **Disclosing Externalities :-**
A new understanding of the “externalities” produced by corporate operations is required.
- **Resource Taxation :-**
Shifting taxes from profits to resource extraction will lead to greater efficiency in use of energy and materials.
- **Limiting Leverage :-**
Central banks can increase their efforts to constrain the misuse of financial leverage.
- **Accountable Advertising :-**
Ethics in advertising should no longer be optional

What can companies do: Sustainable Production

- Non-polluting
- Conserving of . . .
 - energy
 - natural resources
- Economically efficient
- Safe and healthful for . . .
 - workers, communities, and consumers
- Socially and creatively rewarding for all working people

(Lowell Center for Sustainable Production,
<http://www.sustainableproduction.org>; in Albino 2013, 4)

Products and Process

- Products
 - Safe and ecologically sound throughout their life cycle
 - Appropriate, durable, repairable, readily recycled, compostable, biodegradable
 - Packaged with minimal amount of material and energy
- Processes
 - Reducing wastes and ecologically incompatible by-products
 - Eliminating chemical substances or physical agents and conditions that present hazards to human or environment
 - Using appropriate amount of energy and materials
 - Designing work spaces to minimize any hazard

Business practices

- National, international products → local products
- Take responsibility for the effects on the natural world
- Do not require exotic sources of capital
- Engage in production processes that are human, worthy, dignified, and intrinsically satisfying
- Create objects of durability and long-term utility
- Change consumers to customers


(Hawken 1993; in Albino 2013, 5)

Green, Sustainable Supply Chain

- Reducing costs while helping environment
- Facility design, Equipment, Systems
 - Facility design: from traditional bulbs to fluorescents
 - Equipment: Energy efficiency in conveyor belts
 - Systems: Warehouse management system (WMS)
- Logistics and Transportation
 - Full truckloads by combining purchase orders
 - Warehouse planning
 - Establishing a strategic route
 - Alternative Fuel
 - Certification programs

	Low Impact	High Impact
Re-generative	<p>Butterflies</p> <ul style="list-style-type: none"> • Sustainable business model • Strong commitment to CSR • Wide network • Symbiotic network • High visibility 	<p>Honeybees</p> <ul style="list-style-type: none"> • Sustainable business model based on innovation • Clear ethics-based principles • Strategic sustainable management of natural resources • Evolution of powerful symbiotic relationships • Sustainable production of natural, human, social, institutional, and cultural capital • Capacity to moderate the impacts of corporate caterpillars in the supply chain
De-generative	<p>Caterpillars</p> <ul style="list-style-type: none"> • Depend on <i>high burn rate</i> in the form of renewable capital • Operate on an unsustainable business model • Operate in sectors where other companies are moving toward sustainable growth • Have the potential to transform towards more sustainable growth 	<p>Locusts</p> <ul style="list-style-type: none"> • Destruction of natural, human, social, and economic capital • Unsustainable burn rate • Tendency to swarm, overwhelming the carrying capacity of ecosystems • Incapacity to foresee negative system effects • An unwillingness to learn from mistakes

Corporate Types (Elkington, 2004)



Linear (open) to Cyclical (closed) Loop Systems

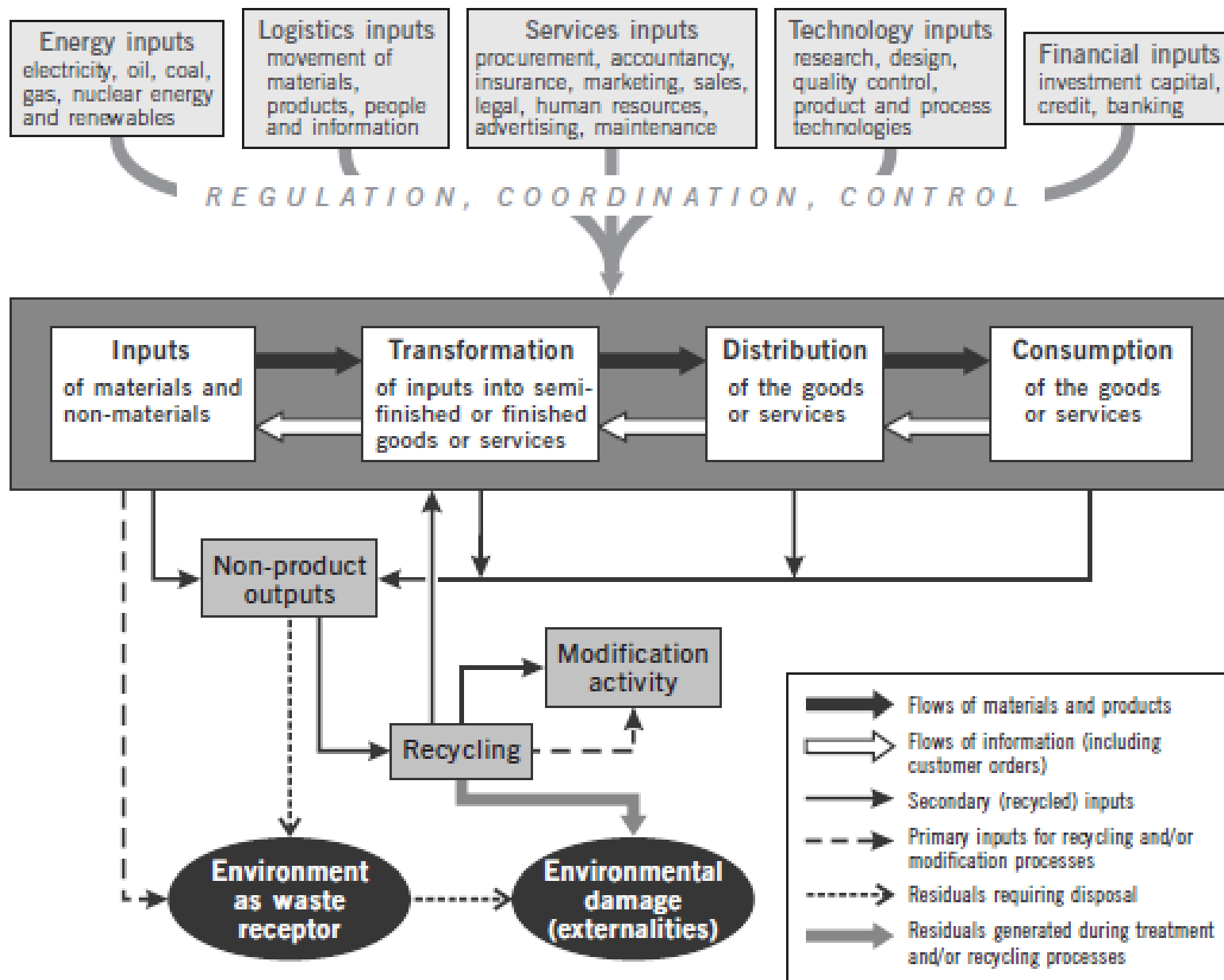
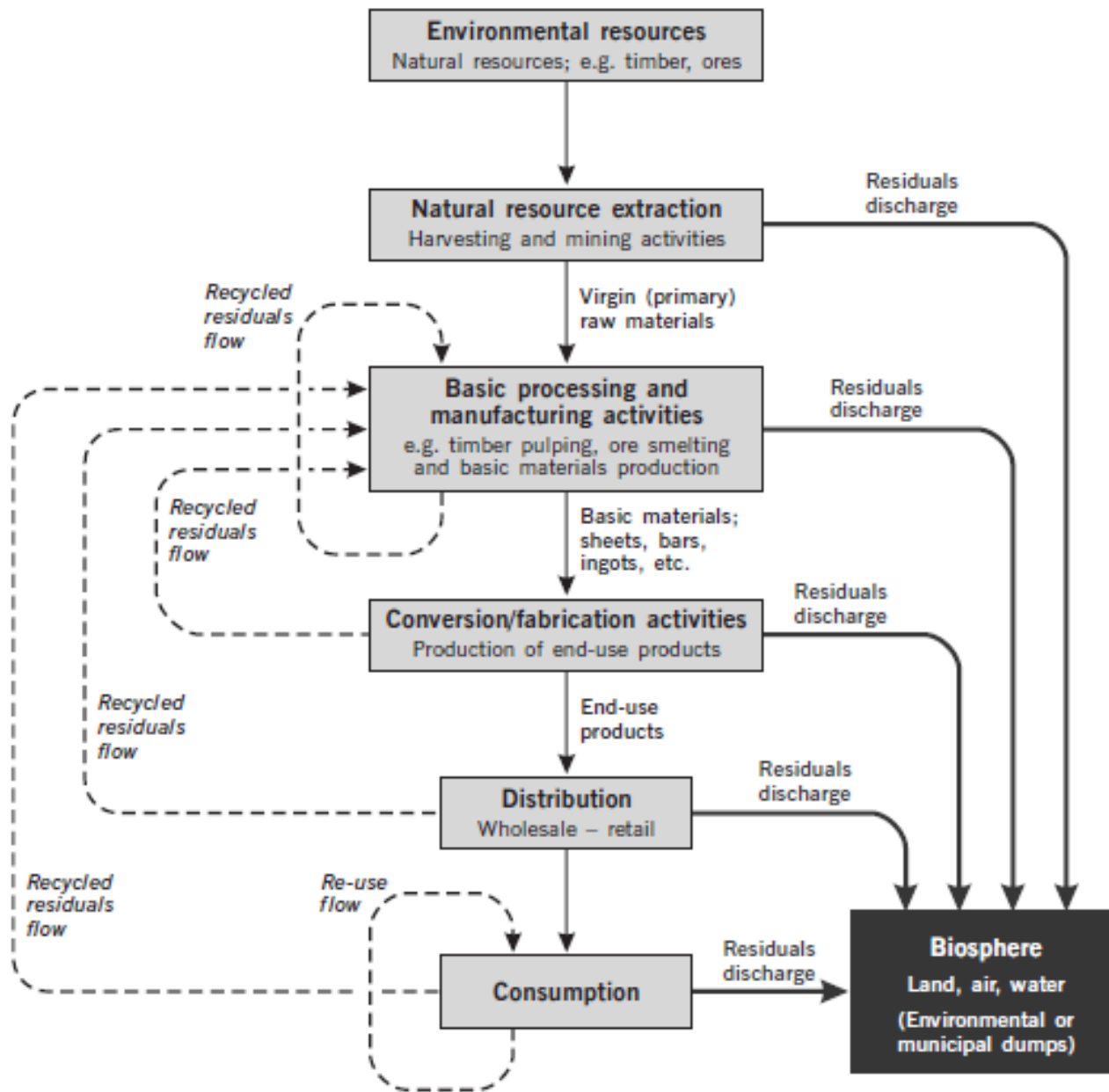


Figure 15.1 Production circuits and the environment

Source: based in part on Turner et al., 1994: Box 1.2



In the production process, materials are dispersed and chemically transformed: they enter in a state of low entropy and leave in a state of high entropy

Figure 15.2 Materials flows in the process of production

Source: based on Turner et al., 1994: Box 1.3

Circular Economy

- Platform for accelerating circular economy (PACE)
<https://www.acceleratecirculareconomy.org/>
- Launched during 2018 WEF
- Public-private action and collaboration on the circular economy

Accelerating and driving change

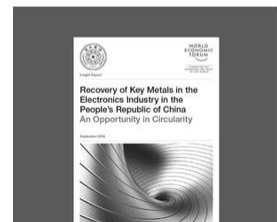
“The transition towards a circular economy is estimated to represent a \$4.5 trillion global growth opportunity by 2030 while helping to restore our natural systems. We have all made progress in advancing this transition, yet we remain frustrated and challenged by the slow pace and scale of change to date. For this reason we have launched this platform to foster leadership and more action-based collaborative projects.”

Electronics

Circular Electronics in China

LONG TERM AMBITION

Help the Chinese government reach its target of recycling 50% of e-waste by 2025 and sourcing 20% of materials for products from recycled sources.



Circular Economy

- Looking beyond the current take-make-waste model
 - Redefine growth, focus on positive society-wide benefits
 - Decoupling economic activity from the consumption of finite resources
 - Designing waste out of the system
 - Underpinned by a transition to renewable energy sources
 - Builds economic, natural and social capital
-
- Three principles:
 - Design out waste and pollution
 - Keep products and materials in use
 - Regenerate natural system

(Ellen MacArthur Foundation:

<https://www.ellenmacarthurfoundation.org/circular-economy/concept>

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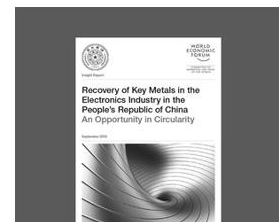
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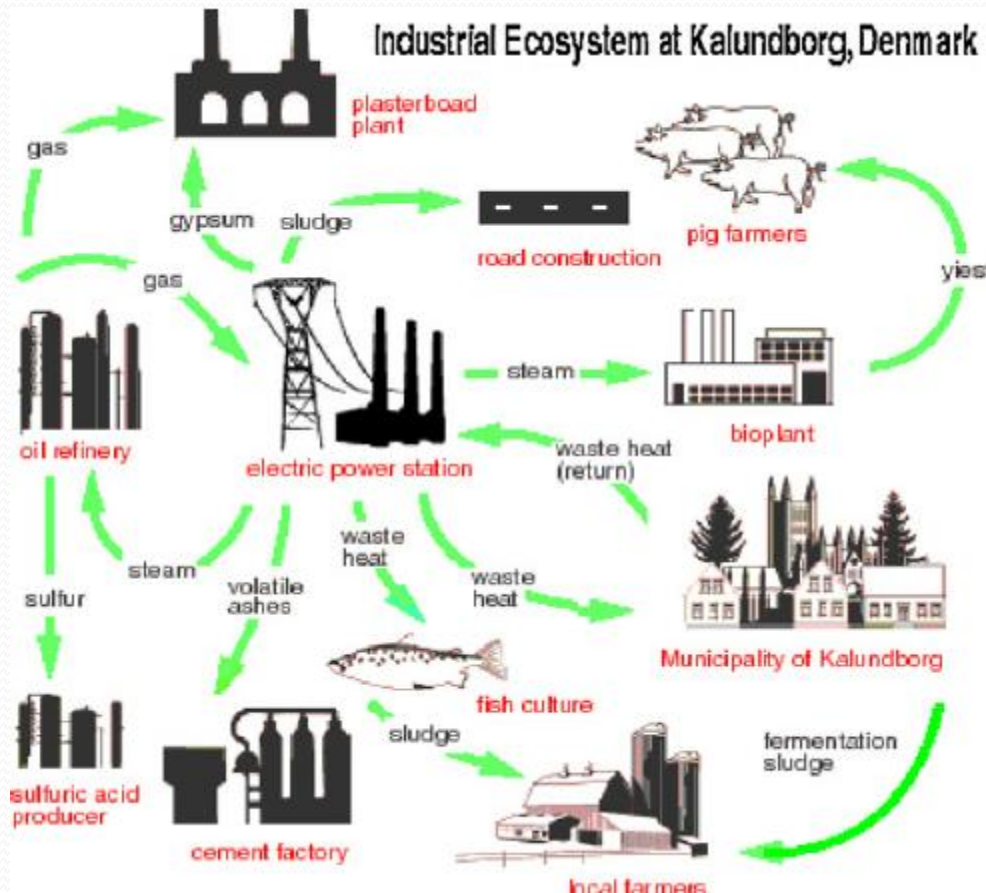


Industrial Ecology

- Goal of industrial ecology
 - to change the linear industrial system,
 - to a cyclical system where the wastes are reused as energy or raw materials for another product or process

(Garner and Keoleian, 1995)

Industrial Ecology



See also A. Garner and G. A. Keoleian, 1995. 'Industrial Ecology: An Introduction', National Pollution Prevention Center for Higher Education, University of Michigan.

<http://www.umich.edu/~nppcpub/resources/compendia/INDEpdfs/INDEintro.pdf>

The Industrial Ecosystem of Kalundborg Denmark

