



FOSTERING INDUSTRIAL SYMBIOSIS FOR A
SUSTAINABLE RESOURCE INTENSIVE INDUSTRY ACROSS
THE EXTENDED CONSTRUCTION VALUE CHAIN

Sustainability and the SDGs

How do they relate to *industrial symbiosis*?

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Sustainable Development Goals

- Replacing the Millennium Goals
- Agenda 2030
- Adopted at the UN Sustainable Development Summit, sept 2015
- 17 goals, all in all 169 targets; 241 indicators
- GRI, the World Business Council for Sustainable Development, and the Global Compact have developed Key Performance Indicators with which businesses can measure current performance & track future contributions



- SDGs – operationalization of sustainable development
- The aspects – economical, ecological, social – can appear vague and abstract
- SDGs have been criticized for being too many – and for not covering everything
- Another critique is that they are not targetting systemic transformations
- Acknowledged for establishing a common agenda/language – across sectorial and national boundaries





Social Policies and Inclusion... Key to meeting the SDGs!

1 NO POVERTY
End poverty in all its forms everywhere for all people



2 ZERO HUNGER
End hunger, achieve food security and improved nutrition and promote sustainable agriculture



3 GOOD HEALTH AND WELL-BEING
Ensure healthy lives and promote well-being for all at all ages



4 QUALITY EDUCATION
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



5 GENDER EQUALITY
Achieve gender equality and empower all women and girls



6 CLEAN WATER AND SANITATION
Ensure availability and sustainable management of water and sanitation for all



7 AFFORDABLE AND CLEAN ENERGY
Ensure access to affordable, reliable, sustainable and modern energy for all



8 DECENT WORK AND ECONOMIC GROWTH
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



10 REDUCE INEQUALITIES
Reduce inequality within and among countries



11 SUSTAINABLE CITIES AND COMMUNITIES
Make cities and human settlements inclusive, safe, resilient and sustainable



12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Ensure sustainable consumption and production patterns



13 CLIMATE ACTION
Take urgent action to combat climate change and its impacts*



14 LIFE BELOW WATER
Conserve and sustainably use the oceans, seas and marine resources for sustainable development



15 LIFE ON LAND
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification



16 PEACE, JUSTICE AND STRONG INSTITUTIONS
Promote peaceful and inclusive societies for sustainable development



17 PARTNERSHIPS FOR THE GOALS
Strengthen the means of implementation and revitalize the global partnership for sustainable development



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United Nations Department of Economic and Social Affairs - Division for Social Policy and Development



Circular economy and the SDGs

- Transformation to systems of sustainable consumption and production
- As the SDGs are quite new, science is lagging behind
- But there are a few studies published quite recently

- Ex. Schroeder, Anggraeni & Weber (2018), in *Journal of Industrial Ecology*
- " The Relevance of Circular Economy Practices to the Sustainable Development Goals
- Convinced that there will be more in the coming years



Schroeder, Anggraeni & Weber (2018)

- Most goals could be relevant, but the article emphasize
- SDG 6 (Clean Water and Sanitation),
- SDG 7 (Affordable and Clean Energy),
- SDG 8 (Decent Work and Economic Growth),
- SDG 12 (Responsible Consumption and Production)
- SDG 15 (Life on Land)



Industrial symbiosis perspective

- General – (Not FISSAC specific)
- “The social dimension of IS the need for companies to interact more extensively than required for ‘normal’ business practices”
- What is regarded as ‘The social’ in different contexts

- Possible relevance also of
 - **16 (Peace, justice and strong institutions);**
 - **17 (Partnerships for the goals)**
- IS – systemic, complex
- Transparency, participation on all levels (communities, authorities)

- Deliverable 1.6 in the project – IS indicators – can be seen as tools for ‘fine-tuning’ the system, while working with the SDGs (and their indicators) can be a way of interacting systemically with a broad coalition of stakeholders





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