

Circular Economy & EcoDesign

What is the idea behind a Circular Economy and how can we contribute to it?

Can we integrate a cradle-to-cradle approach in product development & project design?

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Short Profile: Maya Karkour is the Managing Director of EcoConsulting which she co-founded in the UK in 2003, and established in Lebanon in 2008. EcoConsulting offers inter-related sustainability services to the construction sector, including: LEED & BREEAM certifications, energy-efficiency advice, dynamic thermal modeling, eco-building guidance. Maya oversees or has directly worked on numerous projects aiming at reducing their environmental footprint –including the eco-renovation of Casa Batroun, first project in the Middle-East to achieve the British BREEAM “Excellent” certificate in February 2014, and the Lebanese Architects Sustainability Award in 2017.

Maya holds an MSc (hons) in Environment from the London School of Economics & Political Science and is a LEED Accredited Professional, BREEAM Licensed Assessor, and Low Carbon Energy Assessor. Maya is currently the Vice-President of the Lebanon Mountain Trail Association, in charge of developing and implementing Environmental Education activities, working with the Ministry of Education & public schools. She is also a main local mentor for the SwitchMed Green Entrepreneurship program, and a fellow of the Aspen Middle East Leadership Initiative.

Definition / Benefits	Constraints / Challenges / Barriers
<ul style="list-style-type: none"> ✓ Circular economy: Move out from the linear economy which produces too much waste & does not think upfront about products end-of-life & waste management issues ✓ Each manufactured products to be ideally transformed in Technical Nutrient & Biological Nutrients that can feed back as Inputs into same or other production processes or the earth/ecosystem, thus less usage of raw materials , less toxicity, drastic waste reduction ✓ How to dispose of the product after it is produced? ✓ Also encompasses social aspect of production: not/less harmful, not/less toxic, no child labor, fair trade, etc. ✓ Requires thorough Ecosystem & Product Life-cycle Assessments (LCA) ✓ Requires following thorough EcoDesign considerations/principles, such as Reusability / Recyclability / Biodegradability / Longevity / Durability ✓ Reduced Packaging / Modularity / Disassembly / No or minimum Materials Mix, etc. 	<ul style="list-style-type: none"> ✓ Lack of awareness, “Green” term misinterpreted, even cultured people ✓ Goes against current over-consumption society & only-for-growth corporate objectives ✓ Credible Eco-Labels are usually difficult & costly to obtain ✓ Lack of legislation & local standards ✓ Production process/ supply chain/ value chain has to be sustainable- not just the end product → making it much harder to eco-design as eco-suppliers & environmental procurement is almost inexistent or hard to find or costly ✓ Lack of training/ local skills/ professionalism ✓ Harder / takes more time to be financially viable when competition does not adopt same ethics and standards, however often creative eco-design manages to drastically reduce production costs along the chain by enhanced eco-efficiency ✓ Initiatives are still too small need to grow movement & shift mentalities ✓ Balance between impact and sustainability
Best Practice / Solutions / Tools	Resources / local Availability
<ul style="list-style-type: none"> ✓ Growing international concern for air & water pollution, climate change, toxic waste accumulation, loss of biodiversity Awareness slowly raising and shift of perspectives, more & more consumers are demanding responsible products ✓ Large corporations starting to feel increased pressure from local communities, NGOs, human rights groups, environmental activists, to comply with environmental and health & safety standards. ✓ Governments in particular in Europe requesting more stringent standards and shifting the responsibility to the manufacturers (in particular with regards to end-of-life products disposal) 	<ul style="list-style-type: none"> ✓ International Circular Economy movement, Events & Conferences ✓ Eco-Labels – International ✓ <i>Switchmed</i> Eco-Entrepreneurship Training and <i>SwitchMed</i> Mediterranean Platform ✓ Low-interest loans & Financial incentives for eco-products (ex. <i>Kafalat</i>) ✓ <i>Samir & Claude Abillama Eco-Entrepreneurship Competition</i> (annually in Lebanon) ✓ <i>Diane Foundation</i> investing in eco-businesses ✓ Accelerators / Incubator, scaling up (<i>Altcity BootCamp, Elevate, BDL..</i>) some cater for social innovation and eco-products/ideas ✓ <i>Environmate</i> Competition

<ul style="list-style-type: none"> ✓ Consequently, large corporations & smaller businesses adopting sounder Corporate Environmental Policies & Corporate Social Responsibility initiatives ✓ Increased recognition of the importance of Life Cycle Assessments, and Product Stewardship ✓ EcoLabels – the ones which are well-known and credible not “greenwashed ecolabels” excellent tools for product & company credibility ✓ Companies driving it: improve their green credentials, eco-design while finding creative solutions to current modern issues, and enhance reputation by offering sounder products and good guarantees ✓ EcoDesigning new products allow penetrating new niche markets, catering to a growing number of eco-conscious concerned customers, & positioning a product/ service highlighting its health & environmental benefits. Offers credibility/ honesty to build a brand. ✓ Other tools include public environmental education, reliable sources of information (such as scientific LCA studies), social platforms to break misconceptions, social events / networking to collaborate & grow engagement in eco-design & eco-entrepreneurship and reach the public ✓ Lobbying for regulation & enforcement is more & more important 	<ul style="list-style-type: none"> ✓ International competitions for eco-products/businesses ✓ Some municipalities are encouraging green projects ✓ WWW: Online access to resources & information
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