



Bombay Chamber  
of Commerce & Industry

# Circular Economy

SQ - raising the Sustainability Quotient

Volume 2



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## Reader's Column

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## Editorial.....

India faces many environmental problems today. Our limited resources are under threat due to intensive depletion and serious degradation. Further, we realize that risks to our resource security are compounded due to looming threats of climate change. Policies and strategies to respond to these challenges need mainstreaming of sustainability across all developmental sectors.

Circular Economy offers a platform for all stakeholders to get involved for sustainable and inclusive development. In addition to addressing environmental sustainability, Circular Economy improves the businesses' competitiveness, generates employment, increases green investment flows, builds on partnerships and helps in establishing a transparent and inclusive governance. While there is no debate on the benefits of Circular Economy, one of the major challenges faced not just in India, but globally, is lack of leadership who can accelerate transition to circularity. Given India's ambitious programs and missions such as Atmanirbhar Bharat Abhiyan, Make in India, Smart Cities; building a leadership on Circular Economy is most timely and relevant. In this issue of the newsletter we feature the Global Leadership Program on Circular Economy that will be held in Adelaide in June, 2018 in South Australia.

Communicating the concept of circular economy across stakeholders is a daunting challenge. Many a times, circular economy is considered equivalent to efforts towards waste or water recycling. Its features emphasizing "reduce", achieving "leanness", "inclusive business models" and resulting innovation are not easily understood and practiced. We propose to bring to our readers case studies and sharing of experiences to help clarify the concept and its wider canvas to help move towards smart sustainability.

- Dr. Prasad Modak



## FROM NIMBY TO CIMTE

- Prof. Saravan Krishnamurthy,

Symbiosis Institute of International Business (SIIB), Hinjewadi, Pune.

A constituent of Symbiosis International (Deemed University)

In India, we are proud of our ancient civilizations and celebrate our rich heritage. We however forget that the world around us has rapidly changed in the last three decades. Increased standard of living and affordability of many has resulted in an amplified consumerism. After enjoying our material comforts, the resulting garbage with inadequate disposal mechanisms, has imposed some dreadful consequences upon our soil, water, and air with urban wastes piling up in the outskirts of our cities.

In Pune, open dump sites started to operate in the villages of Uruli Devachi and Phursungi. Pune's massive 1700 tonne wastes disposed in these locations every day leads to groundwater pollution, mosquito infestations, and fire risks in the methane-rich dumping sites. One cannot turn away from such issues with an excuse 'This is Not In My BackYard,' known as the NIMBY Syndrome. We need to convert ourselves from NIMBY to CIMTE (Circularity Implementations for My Town's Environment). As common stakeholders in our living environment, each one of us needs to take up responsibilities, even if they are a beginner's small steps.

As an example of healthy WM Practices in Pune, we must recognize the commendable efforts of SWaCH (Solid Waste Collection and Handling or, officially, the SWaCH Seva Sahakari Sanstha Maryadit, Pune). SWaCH is India's first wholly-owned cooperative of self-employed waste pickers, waste collectors and other urban poor. They provide services for door-to-

door urban household waste collection, waste segregation, resource recovery, trade and waste processing.

Janwani (Charitable Public Trust formed as a social wing of Maharashtra Chamber of Commerce, Industries and Agriculture [MCCIA]) along with Pune Municipal Corporation (PMC), Cummins India, SWaCH initiated a Zero Garbage Project in 2016, at Pune. The objective was to reduce garbage sent to landfills to zero.

For the first time, a private company Serum Institute of India under the leadership of CEO Adar Poonawalla, invested Rs. 1000 million to support PMC to help in cleaning streets of Pune. Serum is also making efforts to set up a waste to electricity generation plant.

Another successful model is in Mumbai. A company Sampurna(e)arth was incubated at Tata Institute of Social Sciences (TISS). Sampurna successfully implemented a waste-to-biogas plant to supply biogas to the kitchen on TISS campus. Similar to SWaCH, various segregation and recycling measures were adopted to reduce garbage going to the landfill. Mumbai generates a whopping 9400 tonnes of waste per day and is sure to benefit by encouraging the growth of such eco-remedy-action-based companies. Today, this financially well-sustained company, aspires to scale up biogas generation from wet waste across Mumbai.



<sup>1</sup> Picture Source - <https://swachcoop.com>





Practicing circularity in India includes remedies to social issues. Both SWaCH and Sampurna(e)arth address women empowerment related concerns. In 1993, Pune's Kagad Kach Patra Kashtakari Panchayat (KKPKP) formed a platform to voice grievances of waste pickers, which later transformed into SWaCH. In Mumbai, the NGO Stree Mukti Sanghatana (SMS) works in close association with Sampurna(e)arth. SMS helps women to resist exploitation, to heal domestic violence victims with counseling. Both organizations encourage self-employment as a means to empower women. Employable work skills such as composting, bio-methanation, and rain-water harvesting are usually imparted through training. In addition, micro-saving and leadership skills are mentored. Both KKPKP and SMS have been featured on the famous the TV show Satyamev Jayate, in India.



As citizens and producers of waste, how can we contribute to practice circularity? We need to learn from our current WM practices, raise awareness, and further the progress towards CE. We need to learn and debate about successful CE implementations. Some examples include:

- Imposing landfill tax on citizens to encourage segregation and local processing, as a strong measure to minimize our contribution to waste reaching the landfill
- Waste reduction programs like Pay-as-You-Throw (PAYT) programs, where citizens are required to pay a flat fee for trash bins or bags and are expected to generate less waste.
- Volume-Based-Waste-Fee (VBWF) programs provide stringent measures to insist on an active citizens' participation in WM.

To promote CE, micro-communities of residential complexes, educational institutions, and organizations alike, need to participate. If we wish to contribute to a healthy future, our collective positive actions are essential. When many of us engage, we are sure to enhance our lives from linear thinking to circular thinking. With the urgency of the urban wastes situations, let us wake up to reality and develop persistent efforts of CE.

This article contains excerpts from a research paper 'Circular Economy for Sustainable Development in India' by student authors Nisha Yaduvanshi, Rupesh Myana, and Prof. Saravan Krishnamurthy, available for free download at [www.researchgate.net/profile/Saravan\\_Krishnamurthy](http://www.researchgate.net/profile/Saravan_Krishnamurthy).



## 5 LEARNINGS FOR INDIA FROM ITALY'S NATIONAL STRATEGY 'TOWARDS A CIRCULAR ECONOMY'

- Lyra Pinto  
Taj Hotels

In recent years, several countries have defined national strategies to transform themselves into circular economies. While India does have pockets of innovation that are using circular models, we are still struggling to break through conventional thinking on recycling and resource efficiency on a larger scale. Customizing strategies from countries where circular concepts are more rooted and widespread could help Indian industry and policymakers chart a clearer course for our own economic transformation.

Italy is one of the few CE leaders whose major economic priorities are fairly similar to India's. Considering Italy's relatively large unorganized sector (estimated at 12.5% of GDP<sup>1</sup>), dominant share of SMEs in employment (79.3%<sup>2</sup>) and urgent need to create jobs for young workers, the Italian National Strategy Towards a Model of Circular Economy in Italy can offer India five major lessons relevant to our immediate future.

### Foster industrial symbiosis to develop SMEs

In India, industrial symbiosis has been mostly associated with geographical proximity and larger manufacturing units. However, as pointed out by one study, industrial symbiosis can collectively improve the environmental performance of SMEs, who may lack the knowledge and resources to individually comply with environmental regulations.

The Italian CE strategy takes this a step further, proposing that industrial symbiosis can also promote innovative models among SMEs. The strategy stresses the need to invest in R&D through a

cooperative network of SMEs, helping them shift to circular production processes. This is coupled with the critical strategic intent to free SMEs from dependency on expensive virgin materials. This would reduce costs, increase competitiveness, and pass on the benefits of the CE to customers through well-designed and competitively-priced products.

### Use education as a tool for economic transformation

India faces a dual skills challenge: first, only about 40% of graduate students entering the job market each year meet the requirements of employers, who demand attributes such as technical excellence, critical thinking, and flexibility, which our current education system does not foster<sup>4</sup>. Second, with about 12 million people joining the workforce annually and between 15%-35% of existing Indian jobs in key sectors threatened by automation within the next 5 years<sup>5</sup>, it is essential to skill people for the jobs of the future.

Faced with similar challenges of employability and employment creation, the Italian CE strategy envisions pairing the CE transition with the country's 'Industry 4.0 Plan', aimed at preparing for the impending fourth industrial revolution. This advocates heavy investment in education, training, R&D, and development of country-wide information sharing platforms. The outcome would be a country oriented towards innovation, digitization, and entrepreneurial creativity, all within the larger framework of sharing resources, skills and even personnel between various parts of the economy.

<sup>1</sup> ISTAT (National Institute for Statistics, Italy), 2017, L'economia non osservata nei conti nazionali. Retrieved 09 Mar 2018 from [https://www.istat.it/it/files/2017/10/Economia-non-osservata\\_2017.pdf?title=Economia+non+osservata+-+11%2Fott%2F2017+-+Economia+non+osservata\\_2017.pdf](https://www.istat.it/it/files/2017/10/Economia-non-osservata_2017.pdf?title=Economia+non+osservata+-+11%2Fott%2F2017+-+Economia+non+osservata_2017.pdf)

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<sup>5</sup> Future of Jobs in India. A 2022 perspective, 2017. A joint report by NASSCOM, FICCI and EY. Retrieved 12 Mar 2018 from [http://www.ey.com/Publication/vwLUAssets/ey-future-of-jobs-in-india/\\$FILE/ey-future-of-jobs-in-india.pdf](http://www.ey.com/Publication/vwLUAssets/ey-future-of-jobs-in-india/$FILE/ey-future-of-jobs-in-india.pdf)

# 5 LEARNINGS FOR INDIA FROM ITALY'S NATIONAL STRATEGY 'TOWARDS A CIRCULAR ECONOMY'



## Leverage financial instruments for a new understanding of value

The Italian CE strategy cites two major barriers to sustainable economic growth in the country—unpriced environmental externalities and limited access to finance for SMEs. These concerns are identical to those faced by India today<sup>6</sup>. A further challenge for India is the tendency to ease environmental and labour laws to attract investors, reinforcing the current linear economic model and traditional perceptions of purely financial value<sup>7</sup>.

The strategy explores financial instruments that could facilitate the CE transition for producers and consumers. Restraining measures like a carbon tax or landfill tax can encourage circular models by reflecting the true cost of negative externalities, while financial incentives can encourage manufacturers and consumers to modify their production and consumption patterns.

## Modernize regulations to move beyond the concept of waste

The strategy urges a profound shift in regulatory approach, since the concept of 'waste' no longer exists in an economy where every output is a potential input. The document advocates that legislation should define

- Flows which can be recirculated as secondary raw materials and are no longer waste
- Flows which can be recirculated but are blocked by regulatory barriers, which must be addressed
- Flows which currently cannot be recirculated, to be researched or phased out.

Regulation can therefore award 'end of waste' status based on rigorous criteria. This would be the

ultimate target for producers of all outputs.

## Create infrastructure for traceability of materials and flows

Long and complex value chains throw up challenges in quantifying 'how circular' a product is. Measures of circularity exist<sup>8</sup>, but require accurate data about the quantity of reused/reusable materials in any product. Given India's large informal value chain, this is set to be a major challenge in the CE transition.

The Italian CE strategy discusses the need for traceability of waste as well as input materials, as one is transformed into the other. The strategy proposes a country-wide 'Register of Traced Chains', making this information available to industry, consumers and legislators. The development of technologies for traceability, especially block-chain based secure ledgers, is therefore a focus area.

India is making initial steps in this direction through enterprises like Banyan Nation. Supporting such technology innovations and exploring methods to integrate the informal sector into the CE are relevant next steps to create traceability systems. This would ultimately enable product labelling, build consumer trust and avoid the risks of greenwashing.

## Conclusion

The private sector can play a part in advocating with governments to adopt transformative economic models, and also in enabling these transformations. Each country is at a different stage of economic maturity, but the concerns driving the push towards the CE are global. Most probably, in keeping with the collaborative principles of the CE, the solutions will be too.

<sup>6</sup> Indian SME Trends, 2016, Economic Times.

Retrieved 12 Mar 2018 from <https://economictimes.indiatimes.com/small-biz/sme-sector/indian-sme-trends-the-year-gone-by-and-2017/articleshow/56254240.cms>

<sup>7</sup> Make in India Policy could Increase Air Pollution Woes, 2015, DW Interview with Vandana Shiva

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<sup>8</sup> Ellen MacArthur Foundation and Granta Design, 2015, Circularity Indicators: An Approach to Measuring Circularity

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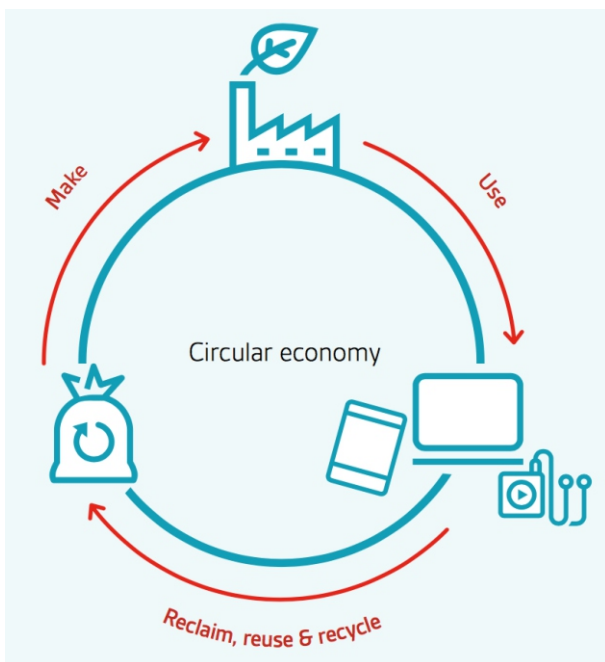




## BS 8001 - SETTING THE MANAGEMENT STANDARD FOR THE CIRCULAR ECONOMY

- Rajiv Ramchandra  
Environmental Management Centre LLP

Circular Economy (CE) thinking has been gaining traction globally as a holistic and stewardship-based economic model that is restorative and regenerative. CE is not a new concept but rather a melding of existing ideas and experience into a coherent and comprehensive framework. In his recent paper, Stefan Pauliuk (faculty member at the University of Freiburg's Industrial Ecology Group) says "The intellectual roots of CE include the 3R principle (reduce, reuse, recycle), regenerative design, performance economy, cradle-to-cradle, blue economy, green growth, natural capitalism, and biomimicry as well as the scientific fields [of] industrial ecology, industrial symbiosis studies, and ecological and environmental economics".



In India, early conversations around CE have begun, and interest is growing. Unlike China and the European Union, there is no legislative mandate in India on CE yet. So, assuming a company is committed to evolving sustainably, in a structured manner, and with a long-term vision, a guidance standard may be of help. In May 2017, the British Standards Institution (BSI) published the first ever voluntary standard issued on the concept of CE - **BS 8001:2017 - Framework for implementing the**

### principles of the circular economy in organizations.

The standard is designed to be a practical guide aiding any kind of organization in learning about and adopting CE practices, irrespective of its "circular economy maturity" level, its size, sector or location. In other words, it can be used by beginners as well as advanced practitioners.

The standard is divided into two areas that seek to answer these fundamental questions:

**Question 1:** What is the circular economy and why move to a circular and sustainable mode of operation?

**Question 2:** How to implement the principles of the circular economy within an organizational context?

Question 1 is answered in *Section 1: General* of the standard which has an extensive compendium of definitions (88 in total), provides clarification of the concept of CE and establishes the relationship between CE and known approaches such as resource efficiency, zero waste, and lean thinking. This section also lists the various benefits to an organization, especially at the macro- and micro-levels. The macro-level benefits include improved resilience of economic systems, economic growth and employment, preserved natural capital and climate change mitigation. Micro-level benefits include cost savings, new sources of innovation and revenue, improved customer relationships, and improved resilience for organizations. Question 2 is answered in *Section 2: Guiding principles*, *Section 3: Flexible framework* and *Section 4: Supporting guidance of the standard*. These three sections form the substance of the standard.

In his seminal work 'The 7 Habits of Highly Effective People' Stephen Covey highlighted the importance of having a 'principle-centre'. Principles serve as a powerful compass. They orient individuals and enterprises based on values, guide them towards a vision-based reality and provide a much-needed bedrock – a 'changeless core' – while navigating the uncertain terrain that comes with transformation. An

Picture Source: <https://albertvilarino.files.wordpress.com/2017/08/economia-circular.png>



appealing feature of the BS 8001: 2017 standard is that it articulates six principles (in *Section 2: Guiding principles*) of the circular economy. These six principles are:

- **Systems thinking:** Understanding the system-wide impacts of your activity
- **Innovation:** Rethinking resource management as a lens for value creation
- **Stewardship:** Taking responsibility for the ripple-effect impacts resulting from your decisions and activities
- **Collaboration:** Securing system-wide benefits by cooperating with others
- **Value optimization:** Keeping materials at their highest value and function
- **Transparency:** Being open and honest about circular barriers and benefits

The standard accedes that these six principles are not an exhaustive list but may be a useful frame of reference for organizational decision-making and behavior.

*Section 3: Flexible framework* provides guidance on determining an organizations level of circular economy maturity (in the context of the six principles) and describes an eight-stage flexible framework designed to aid organizations to practically implement the principles. The eight stages are:

1. Framing	5. Business case
2. Scoping	6. Piloting and prototyping
3. Idea generation	7. Delivery and implementation
4. Feasibility	8. Monitor, review and report

Organizations can choose to start at stage 1 but could enter the framework at any stage based on the determined maturity level. Lastly, *Section 4: Supporting guidance* provides guidance on business models, as well as on business issues and considerations pertaining to the circular economy (such as accounting and finance, change management, energy and fuels, marketing, materials selection and procurement and contract management).

Many companies in India, especially small and medium-sized enterprises (SMEs) are still finding their bearings from the standpoint of developing a long-term sustainability strategy as well as defining clear goals for themselves. This principle-based standard may just be the respite they are looking for.

Standards are not a panacea. But they have their place and provide a function, especially when the concept is new, the path forward is unclear and when there is no historical yardstick to compare against. The BS 8001:2017 standard may be an important resource along our journey of collective evolution.

For more information on the standard please visit: <https://www.bsigroup.com/en-GB/standards/benefits-of-using-standards/becoming-more-sustainable-with-standards/BS8001-Circular-Economy/>

To read Stefan Pauliuk entire paper 'Critical appraisal of the circular economy standard BS 8001:2017 and a dashboard of quantitative system indicators for its implementation in organizations', please visit: <https://www.sciencedirect.com/science/article/pii/S0921344917303531>



## CAN WE OVERLOOK THE ROLE OF INFORMAL SECTOR IN INDIA'S CIRCULAR ECONOMY JOURNEY?

- Jessica Bernard

Environmental Management Centre LLP

India is a country of diverse cultures, traditions and ethos. Circular Economy (CE) is a concept that promotes a regenerative economy while celebrating diversity and indigenous practices. CE emphasises on 'take-make-use-dispose-regenerate' type systems where waste becomes a resource. In addition to the recurring themes of Reduce, Reuse, Recycle, CE brings in social, economic and cultural aspects to the sustainability equation. The model thus strongly voices for an inclusive society where smart environmental solutions and sustainable choices become part of daily lives. In this inclusive system that aims at circular flows and closing loops, informal sector integration becomes an imperative in the context of India.

### Contribution of informal sector in India

Informal sector employees in the waste management and resource recovery markets are not new to many developing countries. Similar to the 'Kabadiwalla' in Delhi, there is 'dong nat' in Hanoi and 'pengepul' in Surabaya. These workers deal with tonnes of waste and divert away significant proportions from landfills every year.

### Contribution of informal sector in India

#### India's Informal Sector at a Glance

- India has approximately 15 lakh persons engaged in waste picking, amounting to 10% of the total waste pickers globally
- By 2026, over 50% of India's population is expected to live in urban areas, leading to an exponential growth in waste generation
- 3-4% of India's Greenhouse gases originate from inadequate waste management. Without the informal sector, this number would likely have been higher.
- In Delhi, waste pickers have saved over 900,000 CO<sub>2</sub> tons per annum, which is nearly 3.6 times higher

than any waste project approved for CDM. Informal sector plays a vital role in waste management and resource recovery sectors. Their engagement with the population has been existent for a long time. Repair and reuse have been part of Indian households. It is the kabadiwalla who collected the old books and newspaper, plastics and similar post-consumer products and explored the valuable materials in those. The households in turn received certain remuneration for their used paper, glass and so on.

Nonetheless, with the rising income and changing living conditions, Indian cities too have started embracing the 'use and throw' culture. The age-old practice of reusing an old cloth as a rag or repairing faulty appliances are disappearing slowly. In this age where we talk of circular economy as a new growth paradigm, a closer look at it would elicit that circularity has been in Indian culture for centuries. In this circular culture, informal sector always played a significant role. Even in the resource recovery sector, we can perceive the extent to which the informal sector workers support recycling. Circular Economy thus, cannot be integrated well into Indian economy unless we mainstream the informal sector activities or find innovative ways for them to be a part of the circular transition.

### Informal Sector and Circular Economy

With the experience in waste management and resource recovery, India's informal sector becomes an inevitable stakeholder in the circular transition. They could be gradually integrated into cooperatives or collectives and sufficient training and education can ensure safe and efficient practices in the industry. Some of the good examples in this regard are the SWaCH Cooperative from Pune and SEWA initiatives in Ahmedabad. These are cooperatives for waste pickers where they are trained and mobilized. The waste pickers then get regular payments and are empowered with better livelihood options.

The cooperative structure for informal sector offers attractive solutions to several Indian cities. Other options can be absorbing them into municipality and



# CAN WE OVERLOOK THE ROLE OF INFORMAL SECTOR IN INDIA'S CIRCULAR ECONOMY JOURNEY?



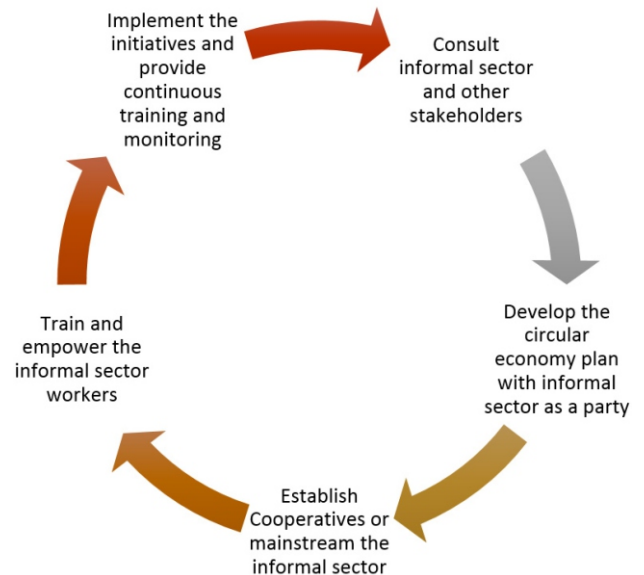
government missions as temporary labour or having a voice for informal sector in National Development Missions. The Swachh Bharat Abhiyan has set a good precedent in this regard. Many start-ups in the Indian waste management sector are also training and employing the informal sector employees. The informal workforce is slowly getting mainstreamed who earlier were unaware of safe practices or health hazards involved in their jobs. The areas within CE where informal sector can contribute are mostly related to ensuring that there is no resource loss at the bottom of the pyramid. As source segregation is still a challenge in India also owing to cultural factors, informal sector can step in with the right training. Other circular economy initiatives can be aligned towards employing the informal sector workers in the innovative circular waste management businesses, carrying the circular missions beyond urban areas, encouraging community wide circular economy activities and developing circular economy solutions for all segments of the society.

## The Way Ahead

Integration of the informal sector has to start from the initial stages of policy making. It is important to give them voice in the decisions made on their behalf. Improving the existing infrastructure to accommodate the informal sector is an important initial step to mainstream the informal sector. Equipping them with appropriate training and adequate skills is necessary to ensure value creation, especially in upcycling. Additionally, measures to tackle price volatility in the sale of recovered materials like plastic, glass and metals are required. These efforts can strengthen the informal sector and gradually internalise them into the formal waste management initiatives. An approach to informal sector integration is depicted in the subsequent section.

## An approach to informal sector integration

To conclude, circular transition and informal sector strengthening and engagement should go hand in hand. As circularity has always been a part of Indian life, practices of resource recovery and recirculation



based need to be revisited and communities sensitized reminding them of on our traditions. An inclusive society rooted in the circular economy principles can render us a sustainable growth.

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## GLOBAL LEADERSHIP PROGRAM ON CIRCULAR ECONOMY



### GLOBAL LEADERSHIP PROGRAM ON THE CIRCULAR ECONOMY

17-23 June 2018 Adelaide, South Australia



Launched at the Eighth Regional 3R Forum in Asia and the Pacific, Indore, Madhya Pradesh, India

**Register now - unique site visits, international experts**

#### Cost

3,232 AUD [GST not applicable for international participants] includes seven nights accommodation from Sunday 17 June to Saturday 23 June inclusive.

Group discount: 10% discount for groups of three or more from the same organisation. Channel partner members should contact Dr Shrikar Dole for more information.

Early bird: 10% discount for bookings by 9 May 2018.

Early bird and group discounts cannot be combined.

International airfares are the responsibility of participants.

#### Register now

[www.greenindustries.sa.gov.au/leadership-training](http://www.greenindustries.sa.gov.au/leadership-training)

Green Industries SA will issue a letter of invitation to support Visa applications.

#### Accommodation

Participants will stay at the Pullman Adelaide, a luxury hotel located at the heart of the Adelaide Central Business District, close to the city's main shopping precinct, Rundle Mall.

#### Airport transfers - Adelaide

Inbound and outbound transfers between Adelaide Airport and the Pullman Hotel will be arranged where possible.

#### Cancellation policy

All cancellations and transfers must be advised in writing. Cancellation and transfers are permitted with no charge until 30 May 2018.

After 1 June 2018: Cancellations - no refund to cover our fixed cost commitments and administration costs.

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### Green Week 2018

Start/End Date – 21 Apr to 10 Jun 2018  
Country – Belgium, City – Brussels  
Sector – Education, Urban Development

The dates are now set for EU Green Week 2018, Europe's leading environment event. From 21 May to 25 May 2018, EU Green Week will take place in Brussels and across Europe. The theme for this year is Green Cities for a Greener Future.

### The International Conference on Consumer Protection in Circular Economy

Start/End Date – 6 May 2018  
Country – Belgium, City – Leuven  
Sector- Eco design, Packaging, Recycling, Sustainable Development, Urban Development

In recent years, policy makers from both the EU and its Member States are discovering the concept of “circular economy” and are increasingly proposing strategies and legal instruments to support the transition from a linear economy towards a more circular economy.

### Sustainability and Circular Economy Summit

Start/End date – 9 May to 10 May 2018  
Location – Washington D.C.

The theme for this year's Sustainability and Circular Economy Summit (#USCCF circular) is Translating Value to Ignite Action. The event will explore how to effectively implement sustainable and circular strategies and will feature case studies, interactive breakout sessions, and hands-on toolkit exercises.

### Circular Economy Symposium

Start/End date- 14 May to 15 May 2018  
City – New Delhi, India  
Location - FICCI Federation House, New Delhi

The symposium aims to bring together national and international experts, as well as decision makers from the sustainability industry, startups, government and academia to showcase innovative strategies and practices that will enable the Indian economy to achieve sustainable economic growth

### How the circular economy can benefit from the digital revolution

Innovative business models enable companies to create value by selling services rather than products, products which are derived by reusing, recycling and repairing the materials from the waste thus leading to a cradle-cradle approach. Digital technologies are seen as a crucial sector for EU to benefit from the concept of circular economy.

[http://www.epc.eu/pub\\_details.php?cat\\_id=4&pub\\_id=8469](http://www.epc.eu/pub_details.php?cat_id=4&pub_id=8469)

### The Role of Business in the Circular Economy: Markets, Processes and Enabling Policies

The report talks about the need for a well structured policy which can foster the transformation of the existing economic structure to that which aligns with the principles of the circular economy, a concept which is attracting significant interest worldwide, as evidenced by the numerous government strategies, business commitments and partnerships devoted to its development.

<http://www.ceps.eu/sites/all/modules/civCRM/external/url.php?u=2573029&qid=151931>

### Circular Economy: A Business Imperative for India: TERI – Yes Bank

The report stresses on the 5R principal—Reduce, Reuse, Recycle, Re-produce and Refurbish and highlights the need for a comprehensive policy framework which extends across the 5 main stages of a typical product life cycle – mining, product design, manufacturing, consumption and disposal. The report also emphasises the importance of bringing in innovative financing instruments.

[www.teriin.org/sites/default/files/.../TERI-YES\\_BANK\\_Circular\\_Economy\\_Report.pdf](http://www.teriin.org/sites/default/files/.../TERI-YES_BANK_Circular_Economy_Report.pdf)





## CHAMBER'S SUSTAINABILITY COMMITTEE'S FORTHCOMING ACTIVITIES

Sr. No	Date	Name of the Event
1	18 April 2018	Certificate Training in Basic Fire Safety - 2nd Batch
2	19 & 20 April 2018	Certificate Training in Advance Fire Safety - 2nd Batch
3	14 & 15 June 2018	Certificate Training in Electrical Safety - 2nd Batch
4	June 2018	Site visit to Schindler, Pune
5	29 June 2018	Workshop on Managing Process and Powder Handling Hazards
6	19 July 2018	Seminar on Innovative Building Materials, Eco-labelling and Environmental Declarations
7	31 August 2018	Interactive Session on Machine Safety

For more details kindly visit website [www.bombaychamber.com](http://www.bombaychamber.com) or contact Ms. Aneeha / Ms. Shruti  
[csr@bombaychamber.com](mailto:csr@bombaychamber.com) / [ybf@bombaychamber.com](mailto:ybf@bombaychamber.com)

### TRAINING COURSES OFFERED BY BOMBAY CHAMBER

Bombay Chamber of Commerce and Industry is 182 years old organisation, an oldest Chamber in the Country. It has been understood that the Sustainability of the business is dependent on the human resource of the organisation. The corporate are investing on their very important Human Resource to enhance their knowledge and skills. As a service to the members and potential members, the Chamber is offering following training courses in the Chamber's premises and organisation's premises as well.

- |                                      |  |
|--------------------------------------|--|
| 1. Women Safety                      | 16. Innovation and Creativity                      |
| 2. Prevention of Sexual Harassments  | 17. Leading with Emotional Intelligence            |
| 3. Management of Finance             | 18. Personal Excellence and Branding               |
| 4. Work-life balance                 | 19. Coaching and Mentoring                         |
| 5. Stress Management                 | 20. Customer Orientation                           |
| 6. Corporate Grooming                | 21. Time Management                                |
| 7. Women Empowerment                 | 22. Transformational Leadership                    |
| 8. Spirituality                      | 23. Towards Winning Teams and Interpersonal Skills |
| 9. Training in yoga                  | 24. Corporate Etiquette & Professional Presence    |
| 10. Women related Health Problems    | 25. Oral & Written Communication Skills            |
| 11. Ergonomics Safety                | 26. High Impact Presentation Skills                |
| 12. Leadership Skills                | 27. New Age Manager                                |
| 13. Conflict Management              | 28. Customer Complaint to Customer Loyalty         |
| 14. Finance for Non-Finance Managers | 29. Leadership & Accountability                    |
| 15. Enhancing Productivity at work   | 30. Effective Meeting Facilitating Skills          |

We are sure that corporate will take advantage of the opportunity.

For more details contact:

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