



## ECODESIGN & ZEROWASTE AT IMTEX/TOOLTECH

IMTEX/ToolTech is a globally recognized brand and shows under this aegis have been organized for the past 51 years by Indian Machine Tool Manufacturers’ Association (IMTMA). IMTEX/ToolTech have Cutting and Forming editions, organized alternately, once in 2 years. These are UFI approved international events and held at IMTMA’s Bangalore International Exhibition Center (BIEC), which is a USGBC LEED certified green venue. Derived from IMTMA’s vision, is the strategy to implement best practices in exhibitions, with a strong emphasis on sustainability. The strategy execution is enabled by the Balanced Score Card & an Integrated Management System (IMS), established 11 years ago and are the key drivers for the Ecodesign & ZeroWaste Program [Fig.1]. The program, which aligns to UN SDG #12, was initiated in IMTEX Cutting 2019 and continued in IMTEX Forming 2020.

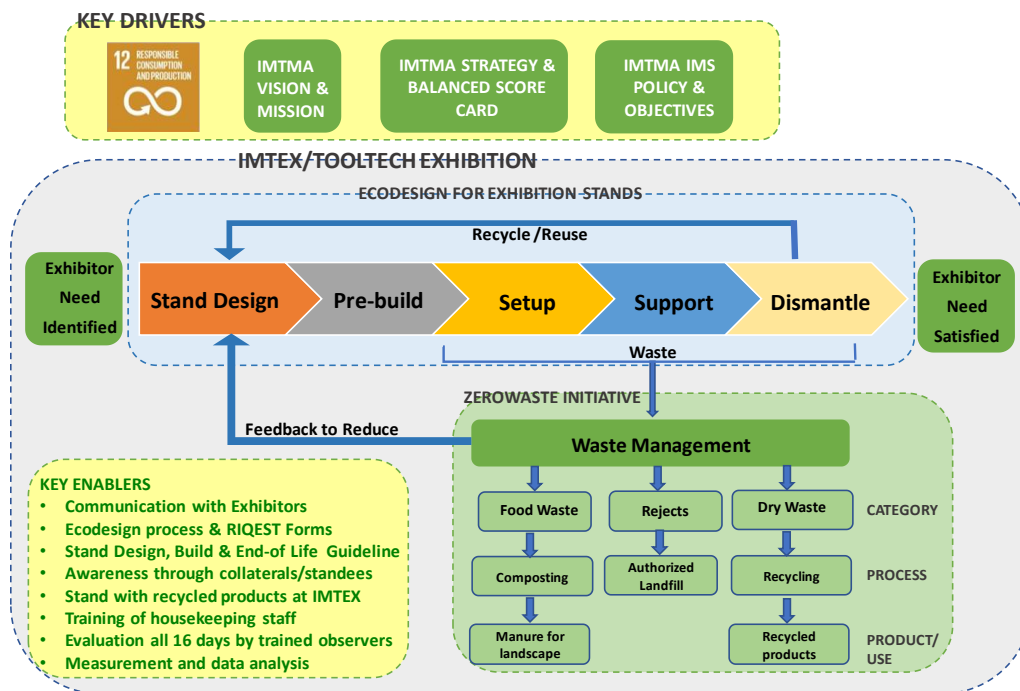
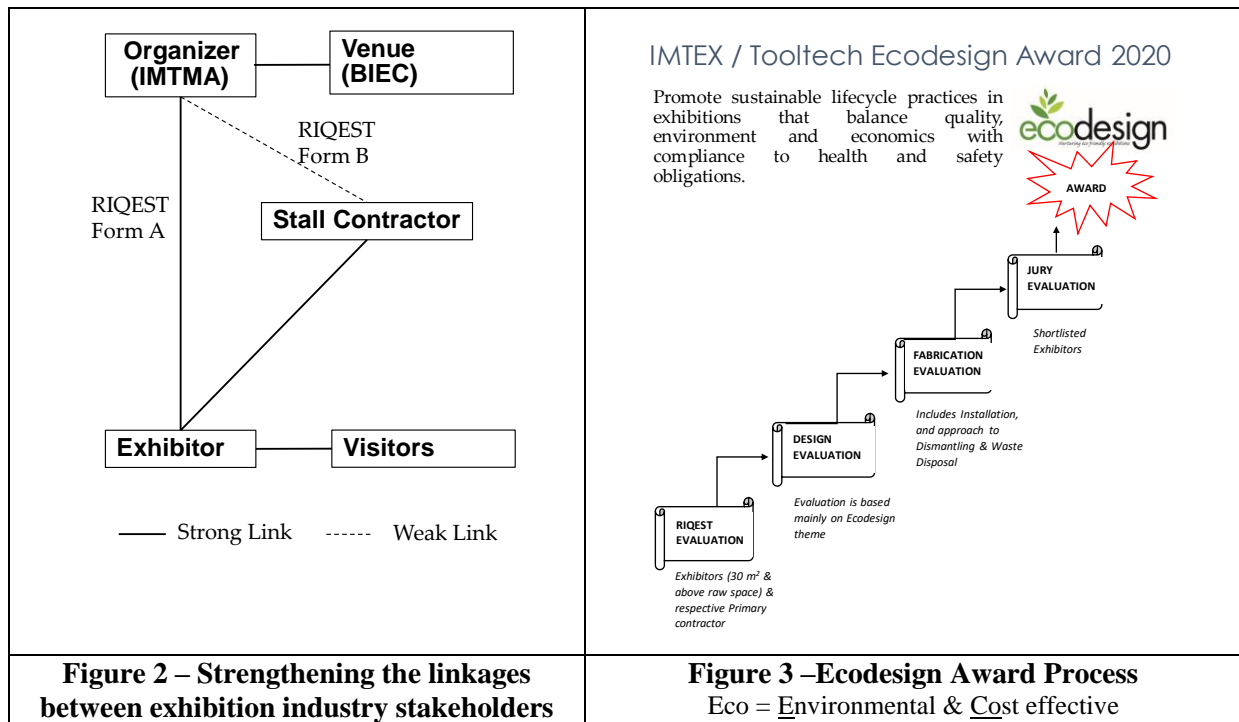


Figure 1 – Program Concept : Enhance the Circular Economy in Exhibitions

## PROGRAM EXECUTIVE SUMMARY

The major challenge is cascading the circular economy approach down the exhibition value chain. Strengthening the linkages, communication and involvement of all stakeholders form the bulwark of this program [Fig. 2], which was conceptualized five years ago. As an encouragement for Exhibitors to proactively embrace Ecodesign in stands, an award was instituted [Fig.3]. The program was strategized, publicized and backed by an execution plan, for set up, during the show & post-show [Fig 4 & 5]. Voluntary participation for Ecodesign increased to 54% in 2020 as against 22% in 2019 and there was an improvement in Ecodesign criteria adherence [Fig. 11]. In the ZeroWaste metrics [Fig.12], there was a 24% reduction in rejects (authorized landfill) and overall, a 38% reduction in total waste.

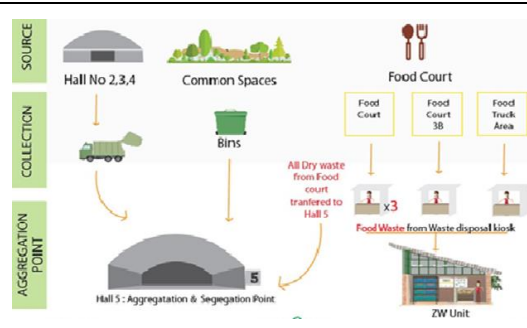


The Ecodesign and ZeroWaste program is an inclusive effort to reduce consumption, recycle exhibition waste and thus minimize the landfill impact. Ecodesign aims at encouraging the Exhibitors and their primary Stand Contractors, to adopt Ecodesign principles [Fig.7]. Ecodesign brings in a “design-in” perspective outlined in a guideline [Fig 8]. It includes recommendations on minimalization, modular designs, avoiding hazardous substances & volatile organic compounds. This dovetails into ZeroWaste, a metrics-based implementation of the circular economy philosophy, leveraging a long-term partner. Focus is on involving & spreading awareness

amongst the stakeholders for waste segregation at source. Special emphasis is given for ensuring maximum resource recovery, by appropriate processing at a proximate Material Recovery Facility.

#	Key Activities / Milestones	Oct '19	Nov '19	Dec '19	Jan '20	Feb '20
1	Distribute Ecodesign 2020 Forms to Exhibitors/Stand Contractors					
2	Conduct webinar & awareness sessions for Exhibitors/Stand					
3	Facilitate Ecodesign application process					
4	Send reminder collateral for segregation of waste				▲	
5	Train the House Keeping team on waste management					
6	Set up of MIS (data capture) system					
7	Finalize fleet plan (compliant loaders & vehicles)					
8	Observe actual stand set-up & evaluate for Jury shortlisting					
9	Waste management operations, including segregation kiosks					
10	Engagement stall for ZeroWaste, with display of recycled products					
11	Present Eco-design Award (Jury recommended)					▲
12	ZeroWaste metrics performance report					

**Figure 4: Program Implementation Plan**



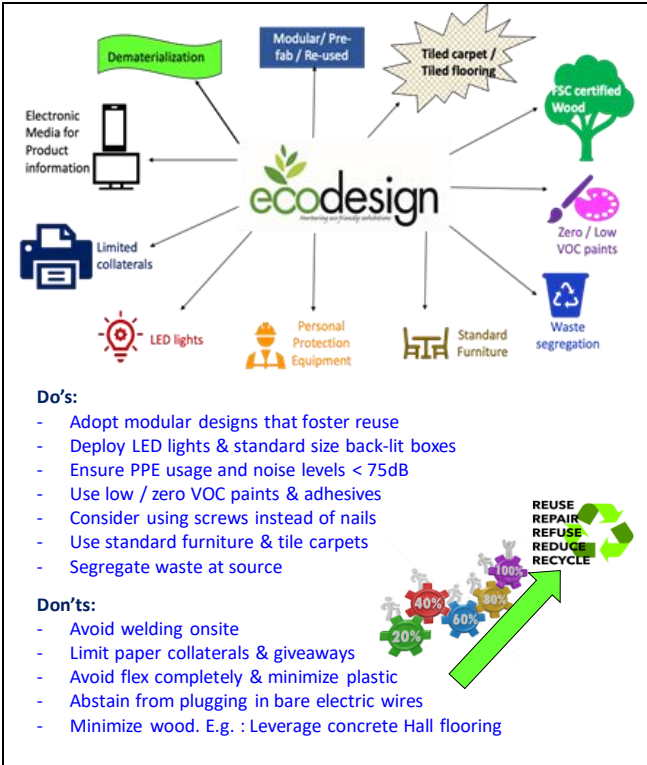
**Figure 5: Onsite Execution during Show**

### Communicating the “Why?”, addressing “What is in it for me?” and How?

The Ecodesign award process [Fig.3] and the ZeroWaste collateral were distributed in tandem with the IMTEX/ToolTech Manual. Webinars with Exhibitors and Stand Contractors (including design houses) were organized. It was emphasized that IMTMA’s marketing team would further publicize the award-winning exhibitors, benefitting the Exhibitors [Fig.6].

<p><b>Branding &amp; Publicity during show</b></p> <p>Trophy and Citation were presented to the Exhibitors in various categories on Day 3 of the show in a well-publicized event.</p> <p><b>Awarded Exhibitors shall also feature in:</b></p> <ul style="list-style-type: none"> <li>• IMTEX/ToolTech, BIEC, IMTMA and ToolTech Websites</li> <li>• Digital screens/LED during the show</li> <li>• Show Daily</li> <li>• Other exhibition events</li> <li>• Thank You Note</li> <li>• IMTEX / ToolTech Retrospective</li> <li>• Mailers &amp; communication to participants and visitors</li> </ul>	<p><b>Award Evaluation Criteria</b></p> <ul style="list-style-type: none"> <li>• Modularity &amp; Re-use/recycling approach</li> <li>• Extent of interaction Exhibitor (design brief) with Stand contractor (design note)</li> <li>• “Designing in” quality &amp; eco practices as communicated in Stand Design Build &amp; End of Life Guidelines</li> <li>• Observation of stand setup on all 7 days at BIEC, and 3 days during dismantling</li> </ul> <p><b>Ecodesign Principles</b></p> <p>Design products &amp; services with an environmental lifecycle perspective</p> <ul style="list-style-type: none"> <li>• Minimize resource consumption</li> <li>• Reduce pollution during set up</li> <li>• Minimal waste post use</li> <li>• Promote re-use</li> <li>• Economical - else not sustainable!</li> </ul>
<p><b>Figure 6: Benefits for Exhibitors who win the award (What is in it for me?)</b></p>	<p><b>Figure 7– Program Purpose (Why?)</b></p>

The Ecodesign program was thus executed based on an inclusive approach, involving key stakeholders. The award is just a first step aimed at encouraging the stakeholders to collaborate and adopt the principles [Fig.7] and Guidelines [Fig.8], with a clear impact on ZeroWaste [Fig 9].



**Fig 8 : HOW – Key aspects from the 13 page Stand Design Build & End of Life Guideline**



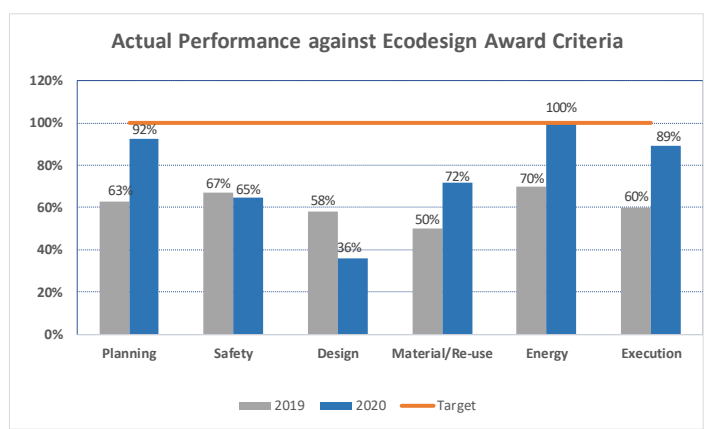
**Fig 9 : Communication/Standee - How Stakeholders’ actions impact the Environment**

## Key Results and Outcomes

The program largely yielded the planned outcomes, as defined in the plan. Re-usable process assets were created, that can be shared as best practices in the Exhibition Industry [Fig.10]. Tangible results are as per [Fig. 11 & 12]. Testimonials from Exhibitors reflect the increased awareness and support for the program [Fig 13]. Increased visitor support, especially at the food courts, for segregation at source during the show was a key change in behavior. Learnings from 2019 clearly helped in attaining these results in 2020. Intangible results within the exhibition supply chain include enhanced Ecodesign awareness, stand elements re-use, waste segregation at source and collaboration between stakeholders, and support in implementing the best practices.

- **Award Process & Forms** (RIQUEST\* Forms A & Form B)
- **Design Brief** (documenting requirements from exhibitor to primary contractor)
- **Design Note** (response of stand contractor to Exhibitor, apart from drawings/3d designs)
- **Guidelines for Stand Build Design and End-of-Life**
- **Tool for evaluation of performance** during set-up (Ecodesign, safety & environment)
- **Jury terms of reference**, including checklist
- **Standard Operation Procedure** for Zero Waste Management
- **Program Implementation Plan**

\* RIQUEST = Registration of Intent towards Quality, Environment, Safety & Teamwork



**Figure 11– Results of Ecodesign**

#	Metric / KPI	2019	2020	% change from 2019	Remarks
1	Carton waste (kg/SqM)	0.19	0.07	-62%	Setup, Show days and dismantling
2	Wood waste (kg/SqM)	1.64	0.99	-40%	
3	Plastic waste (kg/SqM)	0.25	0.19	-26%	
4	Paper waste (kg/SqM)	0.21	0.07	-65%	
5	Reject (Non-recyclables) (% of total waste)	11.82%	9.03%	-24%	
6	Total waste (kg/SqM)	3.20	1.97	-38%	Show days only
7	Food waste (kg per person)	0.12	0.05	-57%	
8	PET bottles (kg per person)	0.13	0.02	-83%	
9	STP Treated water (litres per person)	32.15	19.36	-40%	

Show Data	2019	2020
Total SqM	80,000	33,000
# of Exhibitors	1,200	500
Footfall	91,446	55,000

**Figure 10 – Re-usable Process Assets**

**Figure 12– Results of ZeroWaste**

- Understanding the values on which the Ecodesign theme was built upon was the key
- Minimal noise and air pollution during setup & dismantling
- Used recycled and prefabricated wood, and the carpet has been recycled for in-house use
- Despite an increase in stand size by 43%, the stand cost increased by only 18%

**Figure 13 – Excerpts from Exhibitors Testimonials**

## Next Steps

Apart from Exhibitors, primary stand contractors need to be further encouraged by the industry to implement Ecodesign and enable ZeroWaste. Plans include stand contractor empanelment based on Ecodesign performance and establishing an onsite Dry Waste Sorting and Storage Center. IMTMA shall continue with the Ecodesign award and ZeroWaste focus for subsequent shows.