



**“Green Supply Chain Journey”
And CSR Presentation**

**M/s. Shree Ashtavinayak Glass
Pvt. Ltd. Khandala**

Mentor – Godrej Appliances –Team Shirwal

- ❖ About Shree Ashtavinayak Glass
- ❖ GAD Supplier Cluster Roadmap
- ❖ Green – Initiatives
- ❖ Green – Results
- ❖ Way forward

About Shree Ashtavinayak Glass



Shree Ashtavinayak Glass Pvt Ltd located just 70 Km from Pune in Khandala is a green-field glass processing plant created as a joint venture between the Royal Glass House & Mariegold Group of Industries. It's a culmination of long standing industrial experience of it's partnering firms. It started it's operation in 2009-10

About Shree Ashtavinayak Glass

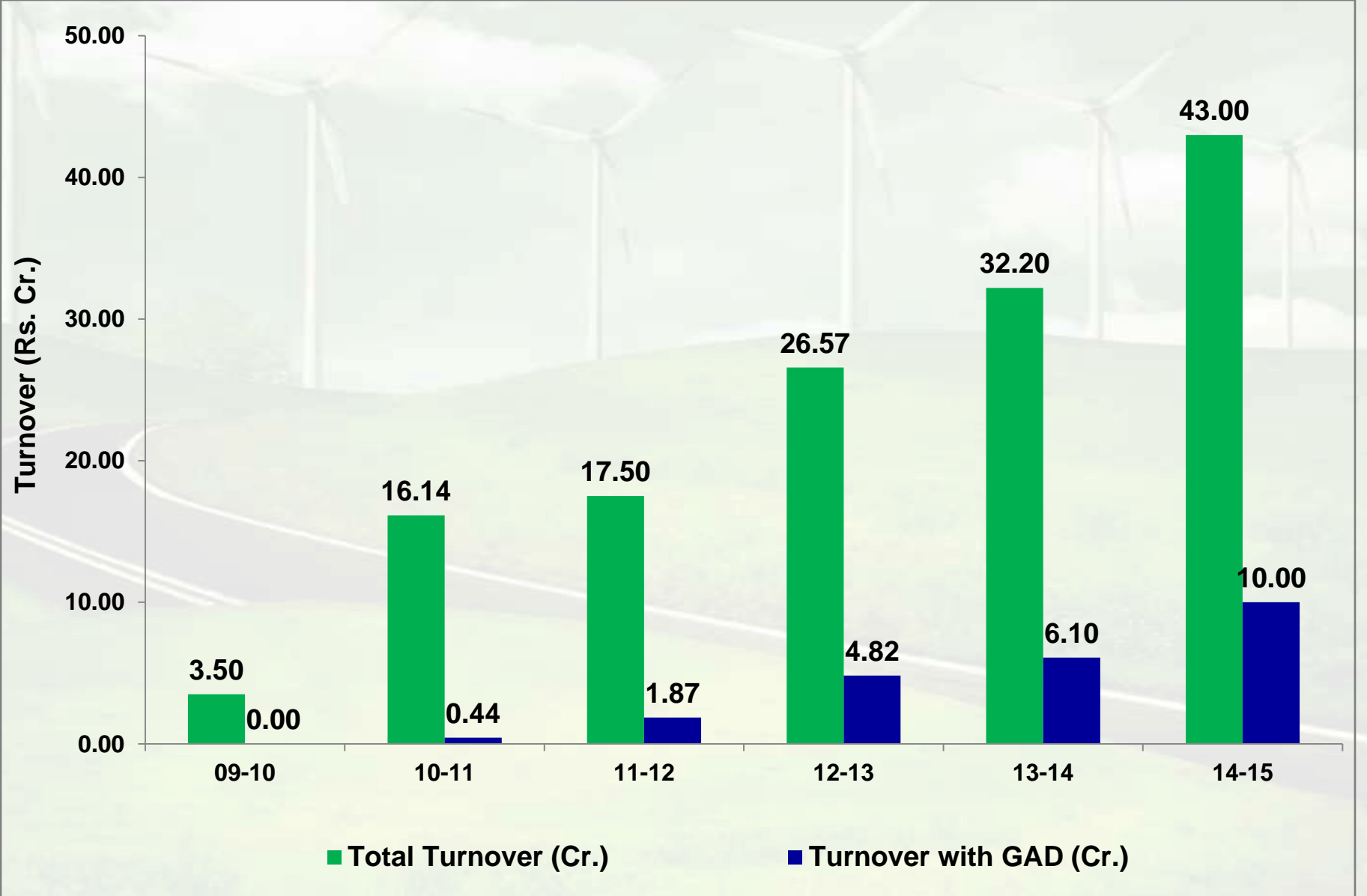
Product Range

- ❖ **e Temp** (Toughened Glass)
- ❖ **e Temp HS** (Heat Strengthened for Reflective & Low e Glass)
- ❖ **Ceramic Fitted & Spandrel**
- ❖ **e Therm** (Insulated Glass)
- ❖ **Others** (Clear / Tinted Float Glass, Mirror Glass, Patterned & Featured Glass)

Our Valued Customers

- ✓ Godrej & Boyce Mfg. Co. Ltd. (Appliance Div.)
- ✓ Tata Ficosa
- ✓ Frankie Faber
- ✓ Schindler
- ✓ Tata Automotives Ltd

Business Score Card



Roadmap GAD Supplier Cluster

ROADMAP FOR GODREJ SUPPLIER CLUSTER

DELIVERABLES

<p>SMED Cellular manufacturing Multi-tasking</p>	<h3>PRODUCTIVITY IMPROVEMENT</h3>	<p>Reduction in c/o time Reduction in throughput time Improvement in labour productivity</p>
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<p>CTQ mapping Concept of 100% inspection Quality Alert boards 7 QC tools + QC story CP/ CPk studies Poka Yoke Calibration SOP creation</p>	<h3>QUALITY</h3>	<p>Reduction in rework (inprocess) Zero defects at customer end Measure cost of Poor Quality</p>
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<p>Mapping and monitoring efficiency of - Energy Water Waste Toxicity</p>	<h3>GREEN</h3>	<p>Reduction in Energy consumption Reduction in Water consumption Reduction in all type of Waste RoHS compliant products and processes</p>
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<p>Step 0 to 2</p>	<h3>MY MACHINE</h3>	<p>Breakdown reduction trend</p>
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<p>1S / 2S Red Tag campaign Fixed point photography Jogging track Safety</p>	<h3>5 S</h3>	<p>1S score worksheet Zero red tag items Before / after photos Boundary walls clear Department Safety Score (DSS), Frequency / Severity rate, No. of accident free days</p>
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Time in Months :			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15						
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1S & 2S Improvements

Hospital Clean Inside



1S & 2S Improvements

Garden Green Outside



Green Initiatives - Energy



Transparent sheets for roofing at regular intervals



Induction Lamps



APFC Panel



Bio-Gas Plant

Green Initiative - Energy



Roof Sheet covered with solar panel

Green Initiatives - Energy

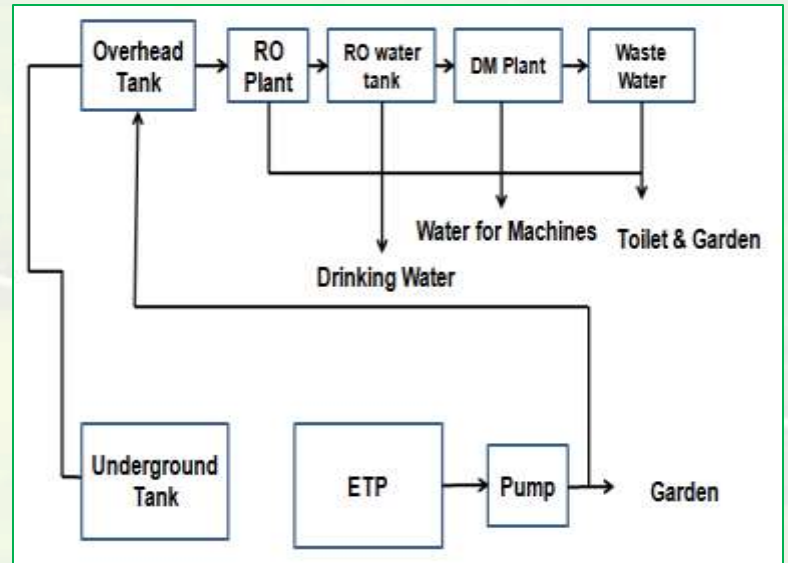
SN	Initiative	Benefit
1	Transparent sheets for roofing at regular intervals for effective utilization of day light	Energy savings – 60000 Kwh / Year
2	Production planning to have continuous running of glass tempering oven	Energy Savings – 84000 Kwh / Year
3	Installation of APFC panel	PF > 0.99 Improved power quality which in tern improves machine life
4	Use of Induction Lamps in place of Metal Clad Lamps for illuminating shop floor & street	Energy Savings – 25200 Kwh / Year
5	Use of LED lights in place of Tube Lights & CFL's in office & utility area	Energy Savings – 8400 Kwh / Year
6	Installation of 225 Kva on roof top Solar project	Energy Savings – 280000 Units / Year
7	Installation of Bio-Gas plant	Savings – 24 LPG cylinders / Year

Green Initiatives - Water

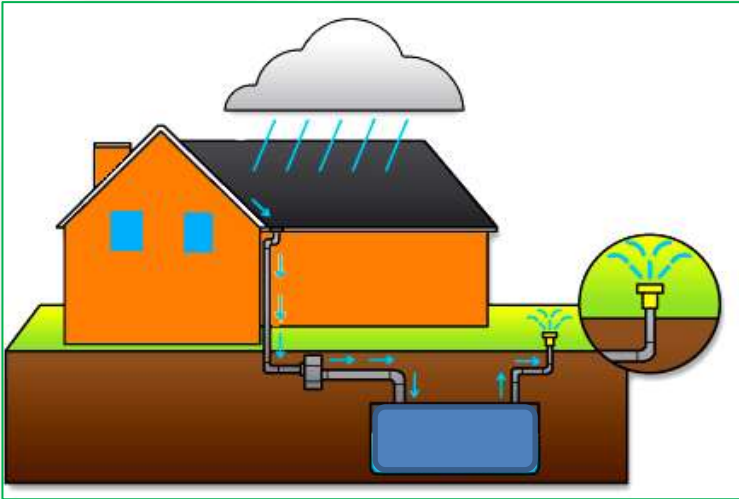


← **Effluent Treatment Plant**

Schematic Diagram – Usage of waste water from ETP



Green Initiatives - Water



Rainwater Harvesting



Sprinklers



Drip Irrigation

Green Initiatives - Water

SN	Initiative	Benefit
1	Installation of ETP to have recycling & reusage of water used for processing	Water Saving – 3600 KI / Year
2	Reuse of water from ETP for toilets & garden	Water Saving – 240 KI / Year
3	Drip irrigation & sprinklers for watering plants in garden	Water Saving – 120 KI / Year
4	Rain Water Harvesting	Increase in ground water level
5	Motion sensors for taps in toilet	Water Saving – 240 KI / Year
6	Up-gradation of production facilities	Water Saving – 15 KI / Year

Green Initiatives - Waste



2D Software for optimization in glass cutting



Recycling wooden scrap for making Exports consignment



Recycling brown paper for packing reflective glasses



Vermicomposting / De-composting

Green Initiatives – Waste



Green House from
recyclable & waste material

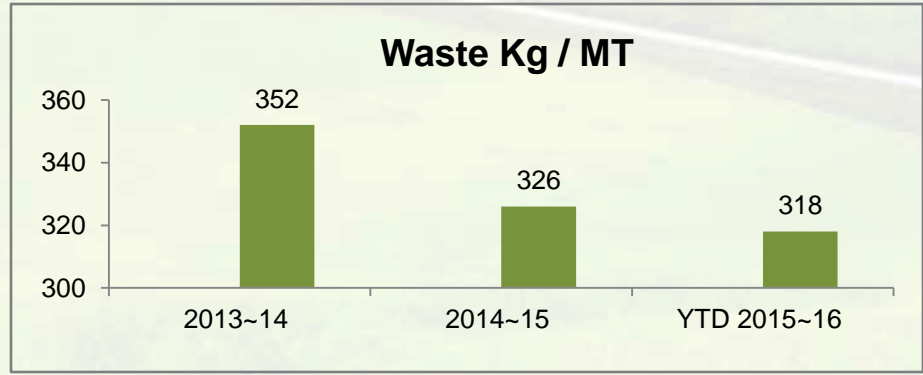
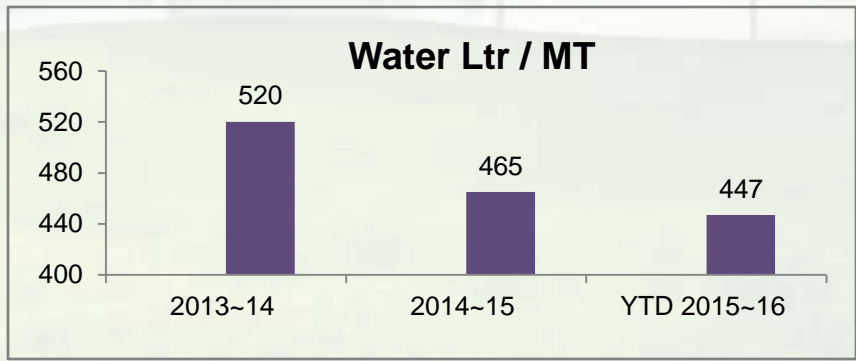
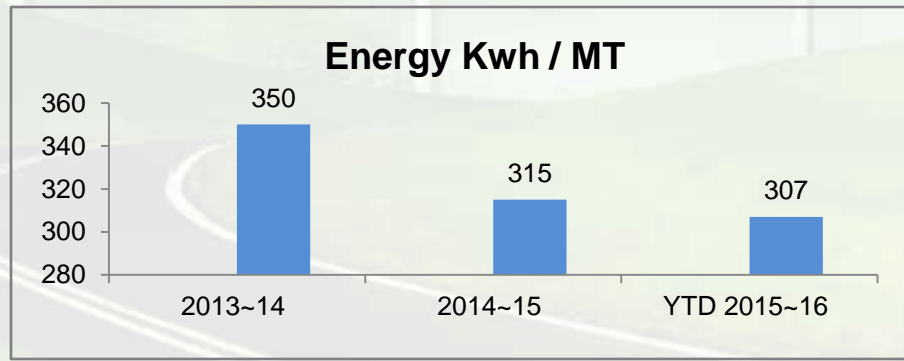
Green Initiatives - Waste

SN	Initiative	Benefit
1	Procurement of RM to suit best cutting layout	Reduction in waste – 216 Mt / Year
2	Use of 2D software for optimization in glass cutting	Reduction in waste – 180 Mt / Year
3	Recycling of wooden scrap for making boxes for export consignment	Reduction in wooden waste – 20 Mt / Year
4	Recycling of brown paper for packing Reflective Glasses	Reduction in brown paper waste – 1.8 Mt / Year
5	Preparation of organic fertilizer from garden waste & cuttings by “ De-composting / Vermicomposting ”	Generation of 3 Mt fertilizer / Year
6	Optimization in printing paper consumption	Reduction in paper waste – 0.6 Mt / Year
7	Construction of “ Green House ” from recyclable & waste material	Recycling of 50000 waste plastic bottles & 0.5 Mt steel

Green - Results

Mapping of Energy, Water & Waste

Parameter Per MT RM Processed	2013~14	2014~15	YTD 2015~16	% Reduction wrt 2013~14
Power (in KWH)	350	315	302	14
Water (in KLtr)	520	465	447	16
Wastage (In Kg)	352	326	311	10



1S & 2S Improvements

Journey towards Waste Management & Control



Horizontal deployment

INSTALLATION OF BIO GAS PLANT IN AFMC - PUNE
AND APANG SCHOOL, PUNE



Investments Vs ROI

SN	Initiative	Investment (In Lacs)	Annualized benefit (In Lacs)	ROI (Years)
1	Transparent sheets for roofing	0.63	2.40	0.25
2	APFC Panel	4.1	9.60	0.45
3	Induction Lamps – Shop floor & Street	9.72	3.25	3
4	LED lights – Office & Utility	0.35	0.60	0.65
5	Bio-Gas Plant	1.00	0.54	2
6	Solar Panels of 225 Kva	160	25	10
7	ETP	5.75	9.00	0.7
8	Drip Irrigation & Sprinkler System	0.25	0.25	1
9	Rain Water Harvesting	0.30	0.30	0.85
10	2D Software for optimization of RM waste	1.35	6.00	0.2
11	Vermicomposting	0.40	0.24	1.7
12	Green House	0.50	1.20	0.55

SHRI ASHTVINAYAK GLASS PVT.
LTD.KHANDALA
&
GRAMSWARAJYA SAMAJIK SEVA SANSTHA
KHANDALA

On CSR Activity

Initiatives Taken Till Date :

- Operating 2 Schools , one for Specially Abled Kids (Strength 45 Students) and second for Tribal students (Strength 25 Kids).
- Started Model village Program at Salav Village completion due in next six months.
- Horizontal Deployment on 15 other villages in the time frame of 3 years .
- Model Village based on Economic , Social and Environmental Impact which will finally result in self-sufficient in terms of basic needs.
- Sponsor ship to 5 students yearly

Program details :

- . Household survey of all selected villages.
- . Villages development plan
- . Key activity
- . Once in week bal sanskar class & educational lecture for undeveloped children's at z.p. school.
- . Once in week girls & adults health training program
- . Personality & skill development program for all age group for 15 days.
- . Day care check up program for older peoples.
- . Career & competitive exam. guidance training program for 7 days.
- . One day employment camp. for youth.
- . Tree plantation, bio gas information, smokeless chulla, toilet construction & use awareness & water conservation programs for villages











Work Done in Nearby Villages Till Now

- School Toilet 5
- Village Toilet 10
- Village Library 1
- Yuth mandal Gym 1

Model Village Salav

- Biogas and Solar Lamp
 - Women's Training & Self Employment (Manufacturing Low cost Sanitary Pads)
 - Water harvesting Project
 - Animal
- Career Guidance & Competitive exam center



- Small groups biogas in Village Salav, Khandala



- Toilet biogas in Village Salav, Khandala



Reward & Recognition



Way Forward

- . Installation of *solar panels every Year*
- . Calculate & optimize *Carbon Emissions – project ongoing with CII – GBC emissions* , data collected and mitigation plan given.
- . Create one Model Village in next 6 months and then Horizontally Deploy in 15 villages where survey has been done in regards of Economic , Socio and Environmental aspects in nearby areas
- . *Green Co certification .*
- . *200000 Tree plantation* in The nearby villages in next 3 Years



Thank You....