



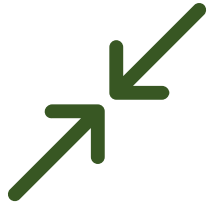
**AVANTI/PRARA**

**LEATHERS**

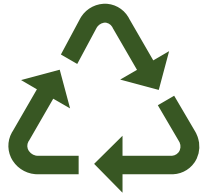
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**SUSTAINABILITY – ONE STEP AHEAD**

# 4 R's at AVANTI LEATHERS



Reduce



Reuse



Recycle



Rethink

We are not only applying a circular model to our processes but think outside the box to achieve the best possible sustainability performance.

# SDGs AT AVANTI LEATHERS



# REDUCE

## We reduce...



Water by 30%



Chemicals 30%



Electricity use by 50%



Use of natural resources



Amount of waste that goes into landfill



# REDUCE

We reduced the use of plastic at AVANTI LEATHERS and reuse the plastic from packaging.

We provide fresh, clean drinking water for all our employees and motivate them to use their own bottles for refill.



# REUSE

As part of our policy, we work according circular business practices. This starts at reusing our resources as often as possible before disposing it. Some examples listed on this page will be introduced on following slides:

1

Reuse of wastewater through our special ETP

2

Reuse of chemical sludge as bio-fertilizer (in-house patent)

3

Reuse of shaving dust as natural fillers

4

Reuse of plastic packaging where it is not yet eliminated

# RECYCLE

## SOLID WASTE

We reduce the amount of waste going to landfill by recycling/ upcycling in different ways:

- Our shaving and trimming waste is converted into natural protein filler and reintroduced into the process.
- Sludge is treated and converted to bio manure used for in-house plantation and to support local farmers with organic fertilizer.

## LIQUID WASTE

- Our ETP water is treated with RO/ Ultrafiltration and used in the process or for plantation irrigation.

# RETHINK

With our unique implementations we go beyond...

## The Qualus Process

We reduce water usage by introducing small polymer spheroids who act as delivery mechanisms.



30-40% of the water in the drums is replaced by these spheres, which is resulting in a more effective delivery of the chemicals to the hides/skins. Dosing of chemicals can therefore typically be reduced by 15%.

This saves water, chemicals and cost and increases productivity, product yield and overall production capacity.

So far we have 5 such drums in action and plan to finalize the rest of the drums by end of 2022.



# RETHINK

With our unique implementations we go beyond...

## Bio Manure Production

- In-house R&D, officially confirmed data and patented process
- Convert primary sludge into bio-fertilizer used in plantation
- Rich in Nitrogen and Phosphates
- Elimination of heavy metals like Chrome and Chrome VI

PARAMETERS	UNIT	SLUDGE	BIOMANURE
TOTAL ORGANIC CONTENT	%	3.19	2.98
NITROGEN as N	mg/kg	1265	126
PHOSPHORUS as P	mg/kg	950	109
POTASSIUM as K	mg/kg	410	312
SODIUM as Na	mg/kg	409	186
CALCIUM as Ca	mg/kg	810	590
CHLORIDES as Cl	mg/kg	412	312
MAGNESIUM as Mg	mg/kg	1765	1612
TOTAL CHROMIUM as Cr	mg/kg	4.1	<0.20
HEXAVALENT CHROMIUM as Cr+6	mg/kg	1.95	<0.20

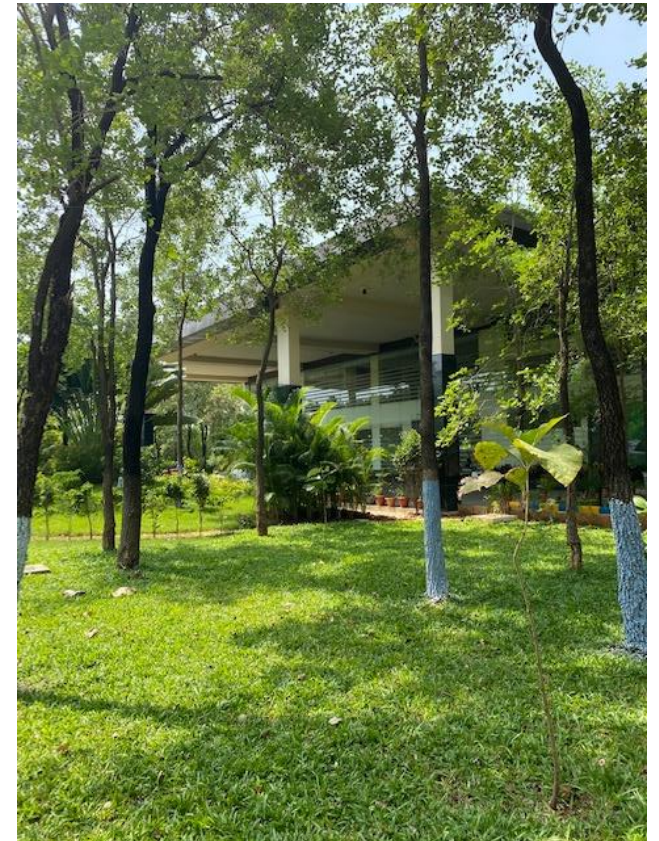
# RETHINK

With our unique implementations we go beyond...

## Tree Plantation Project

We planted more than 150.000 trees in the last three years that have multiple purposes. They...

- ...reduce the heat and provide shade
- ...provide fruits such as Mangoes, Jackfruits and Coconuts
- ...are habitation for animals and insects, providing a rich flora and fauna
- ... offset the carbon produced on site



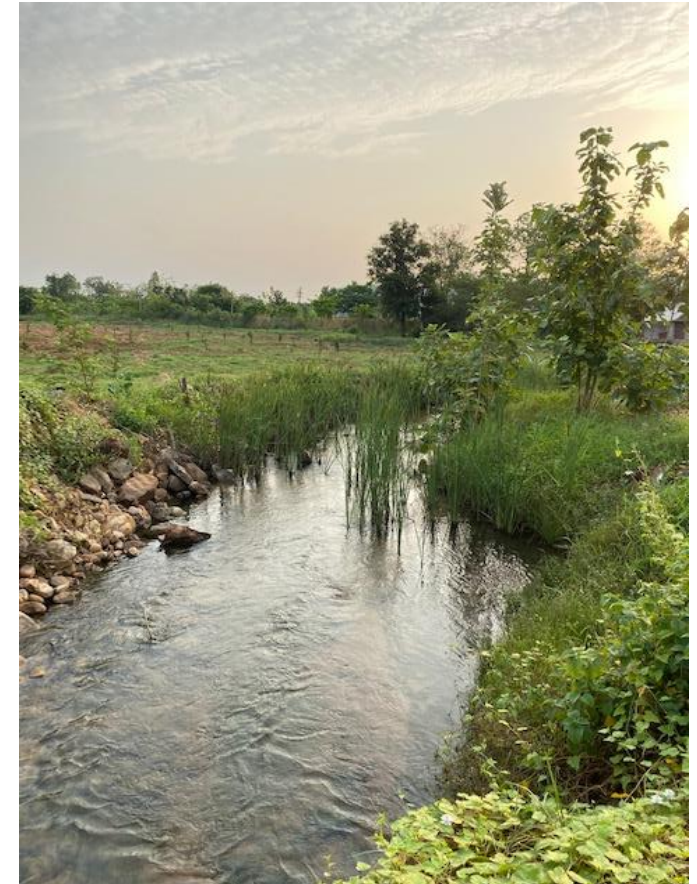
# RETHINK

With our unique implementations we go beyond...

## Effluent Treatment Plant (ETP)

Our ETP is unique as we...

- ...eliminated Aluminium Sulphate and Lime, replacing it with Caustic Soda.
- ...send the water through five sand and five activated carbon filters, before using an ultrafilter to reduce the TSS load.
- use the cleaned water for production or irrigation of the plantation.



# RETHINK

With our unique implementations we go beyond...

## Solar Systems

- We use a special solar system to produce about 200.000 liters of hot water per day used in production. This enabled us to lower our energy use drastically.
- Separately we have solar panels on all facility roofs which produce enough energy for internal use as well as feeding it into the local grid.





## Our sustainable tanning methods



Chrome and metal free leathers considering all sustainability parameters of leather production. We reduce water consumption and TDS by 40%.



Pure veg tannage from Mediterranean olive trees providing high quality, biodegradable leather that is skin-friendly, free from heavy metals and save to work with.



Synthetic tannage that stabilizes the collagen to ensure a long product life. Simultaneously the articles are kept natural to ensure biodegradability if required.



Lite leathers provide multiple advantages such as lower water and chemical intake, as well as an improved comfort through the reduced weight.

# SUSTAINABILITY MEANS SOCIAL IMPACT

## We care about our employees and local communities

Avanti Leathers looks after its social impact through equal rights, gender equality and other implementations introduced on the next slides.

Further we have defined a clear roadmap strategy how to improve this impact with time and introduce new, important social projects.

Because Avanti means being one step ahead...





# EMPLOYEES



All our staff lives close-by or is provided with free housing on site.



We have bias-free payment schemes.



We train local women without leather background to work in the factory. This enables them to be independent and have a formation.

# LOCAL COMMUNITY



We support a School in Chennai for children with disabilities.



We provide local farmers with our bio-fertilizer to improve their harvest performance.



We financially support social community functions and sponsorships.



We provide drinking water tanks to the local community.

# Sometimes pictures say more than words...

Watch our Youtube Videos to learn more about Avanti Leathers:

A Preview: <https://youtu.be/3VJ7LYDOJGS>

Getting Acquainted: <https://youtu.be/DA762BFBHFA>

Our Sustainable Processes: <https://youtu.be/F-ET3CV9J2S>

The Facility: <https://youtu.be/ESVCEJIMWNA>