



# Life Cycle Analysis

# The product we work on

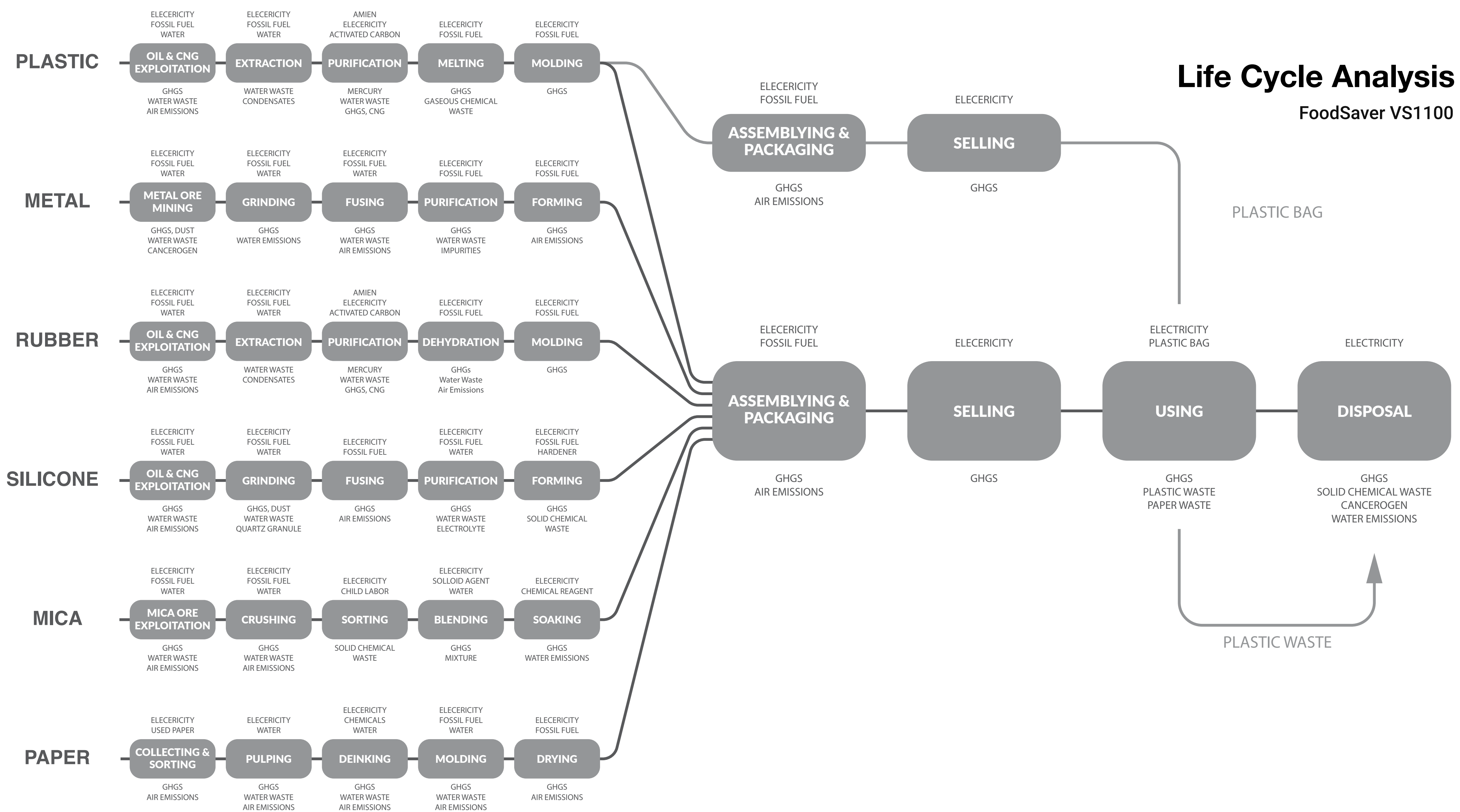
FoodSaver VS1100 Space Saving Food Vacuum Sealer





# Life Cycle Analysis

FoodSaver VS1100



# Okala - Impact Factor Point

The total impact factor point is **302.5/per machine**(not including plastic bags).

The manufacturing process takes 146.79/ per machine and the disposal takes 155.71/ per machine.

One Year Use                    302.5/year

Three Year Use                100.8/year

Five Year Use                   60.5/year

	IFP(process)	Weight/lb			IFP(landfill)	Total Point
CR-1520	2.1	0.02	0.042		39	0.822
ABS	2.4	1.35	3.24		35	50.49
TPU	1.1	0.01	0.011			0.011
TPE	1.1	0.01	0.011			0.011
NBR	8	0.01	0.08			0.08
PP	1.9	0.05	0.095		26	1.395
PA	1.6	0.01	0.016		60	0.616
POM	1.6	0.01	0.016			0.016
PC	3.7	0.01	0.037			0.037
PVC	13	0.01	0.13		39	0.52
teflon	510	0.01	5.1			5.1
stainless steel	13	0.13	1.69		2	1.95
SGCC steel	13	0.2	2.6		2	3
Screw Steel & Zr	7.6	0.06	0.456		2	0.576
Zine plating	1.4	0.01	0.014			0.014
1215 carbon steel	6.2	0.05	0.31		2	0.41
copper/brass	29	0.01	0.29		98	1.27
Aluminum	13	0.07	0.91		39	3.64
Mica	1	0.01	0.01			0.01
Silicone	1.2	0.01	0.012			0.012
fiberglass	1.8	0.01	0.018			0.018
Circuit board	320	0.28	89.6		360	190.4
corrugated board	0.59	0.6	0.354			0.354
paper(coated)	1	41	41			41
polyethylene	1.8	0.22	0.396			0.396
PA	1.6	0.22	0.352			0.352

## Three main issues

in the life cycle of food saver



**Social impact on MICA**



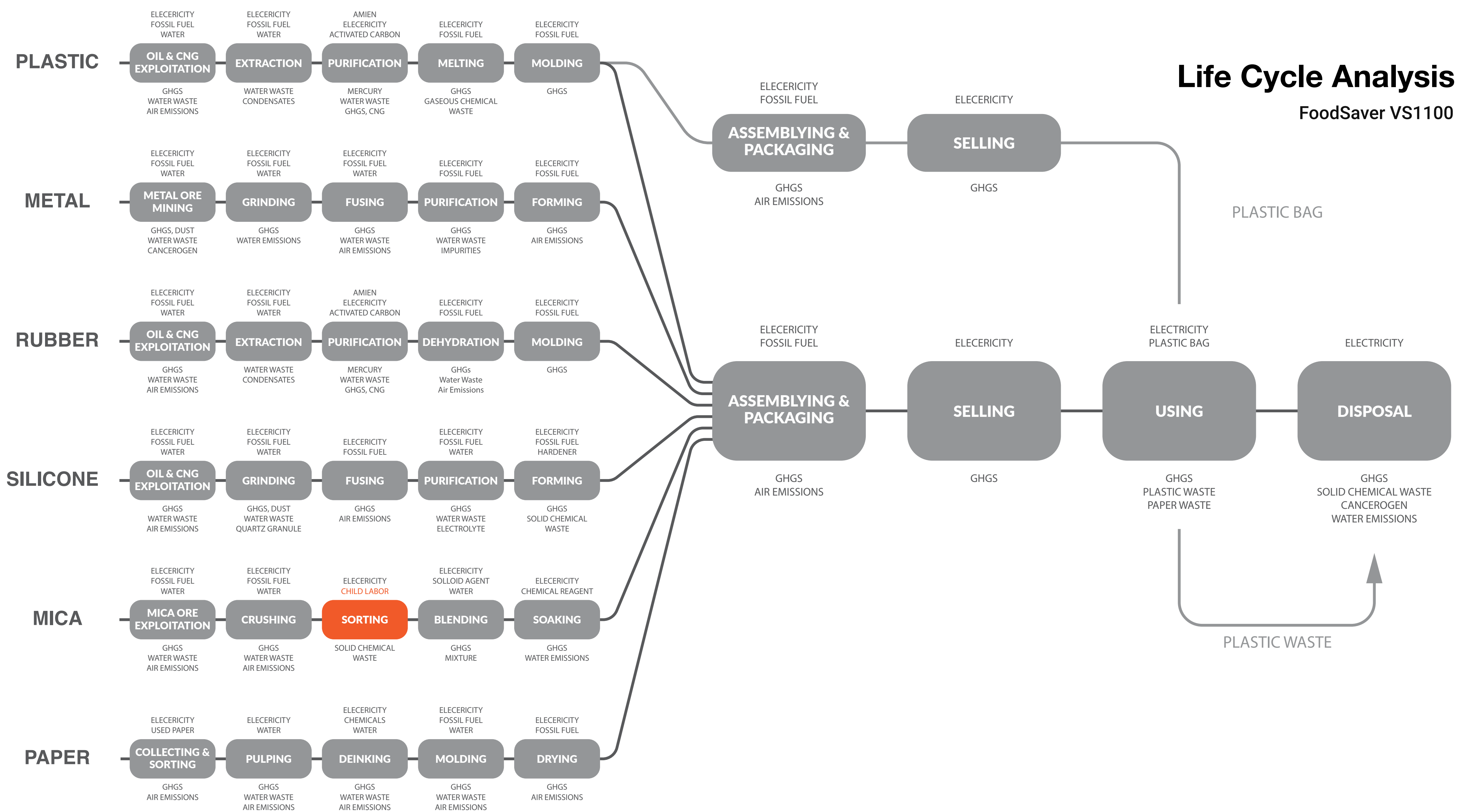
**Environmental impact on  
plastic waste**



**Disposal of circuit board**

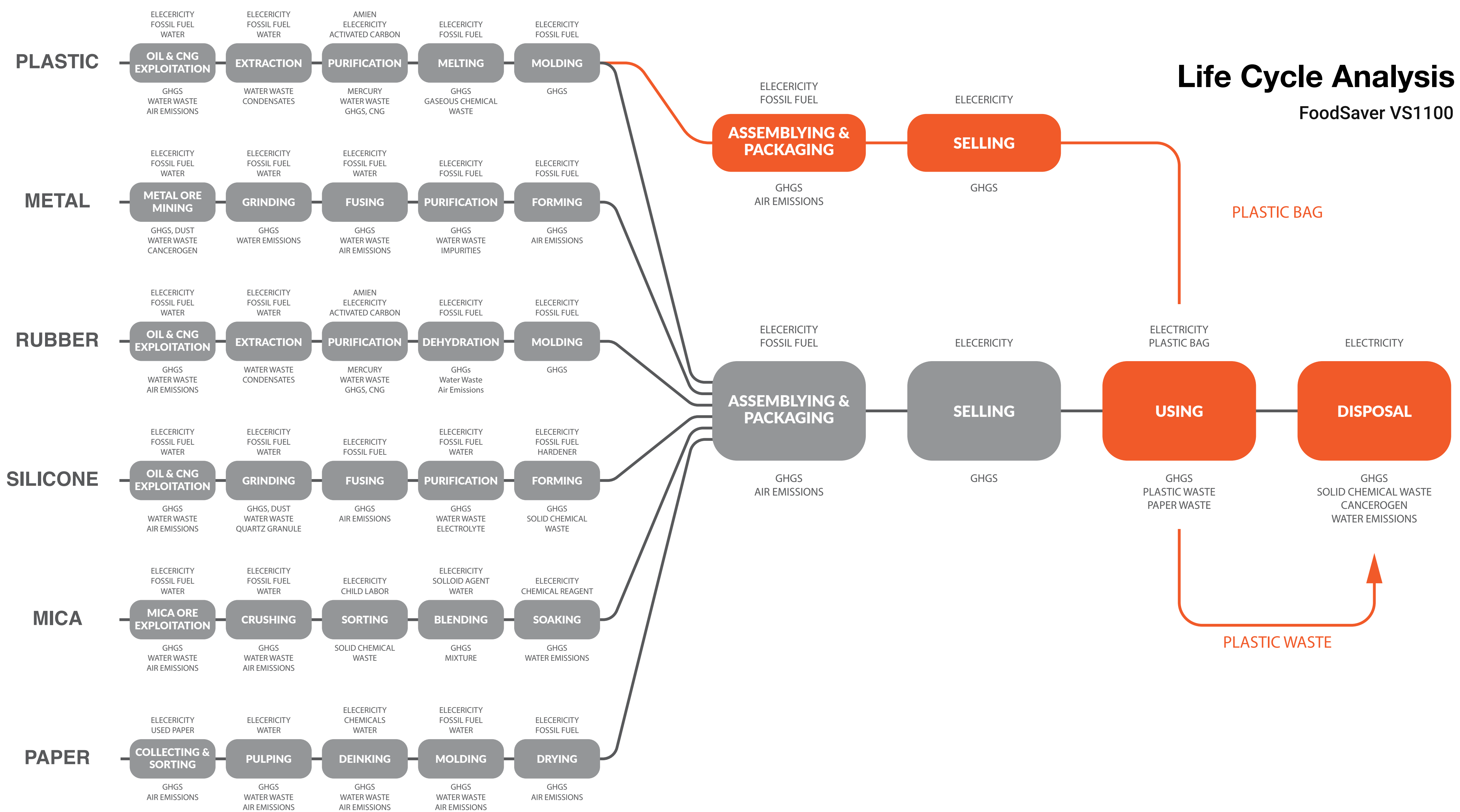
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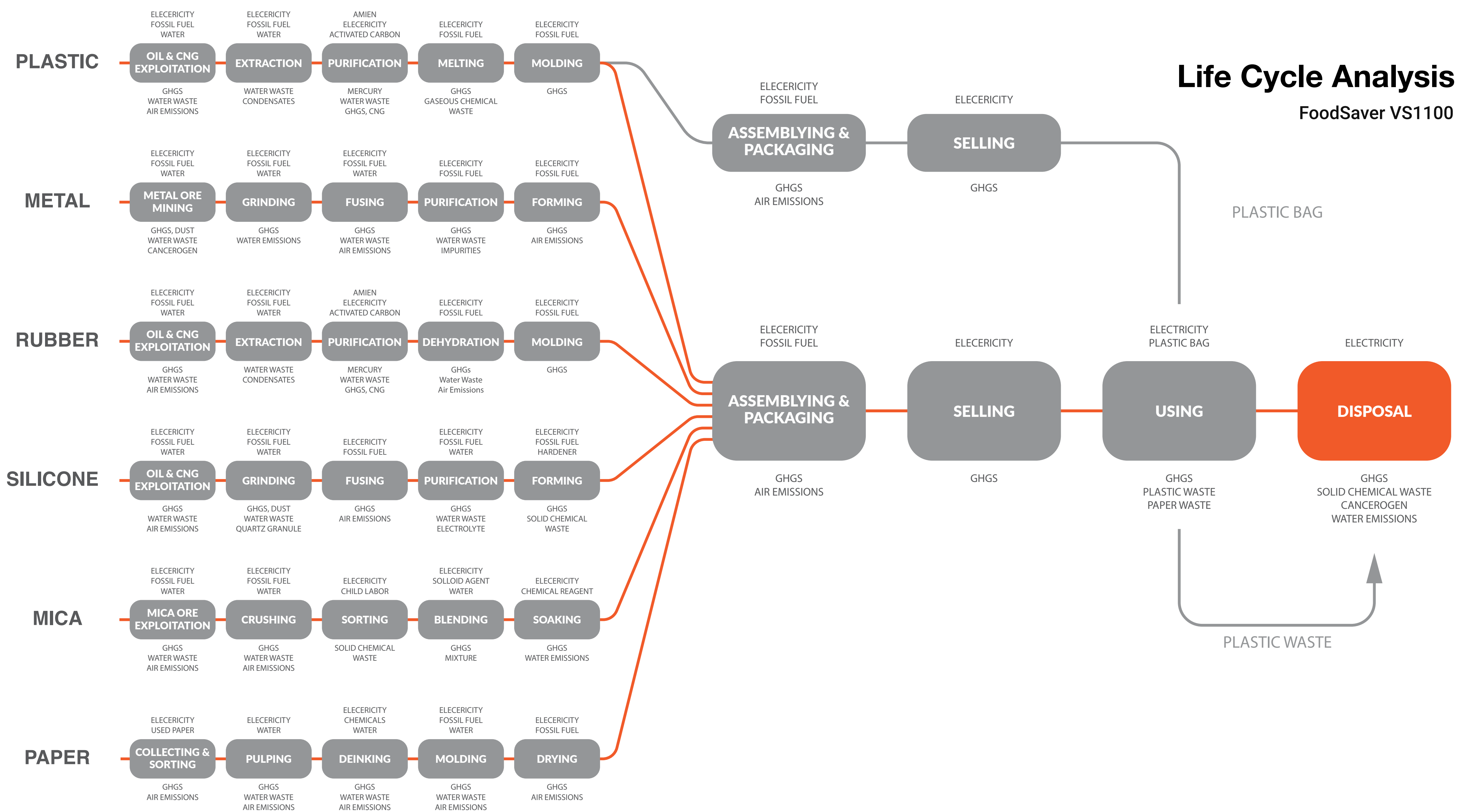
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## Social impact on MICA



### Illegal Child Labor

Crippling poverty forces many families and their children to mine the highly prized mineral, with as many as 20,000 children believed to be working in mica mines, about **90%** of which are illegal.

### Opportunity

How can we reduce social impact of mica used in FoodSaver?

## Environmental impact on plastic waste



### Fact

After purchasing the FOOD SAVER, you still need to buy a lot of plastic bags when the accessory ones are finished. These plastic bags are usually used for only one time before they are thrown away. And it takes hundreds of years for them to be degraded in the wild.

### Opportunity

Can we make it reusable or make it easier to be degraded?

## Disposal of circuit board



### Fact

Electronic devices are toxic yet still ending up in landfill.

The IFP of the FOOD SAVER circuit board disposal was 190.4, which is more than 60% of the whole machine.

More and more states in the US are banning electronics from being thrown in the trash and going to the landfill.

### Opportunity

How can we reduce the environmental impact of disposing the vacuum sealer?