

Resource efficiency indicators for WT industries

The following five indicators are proposed:

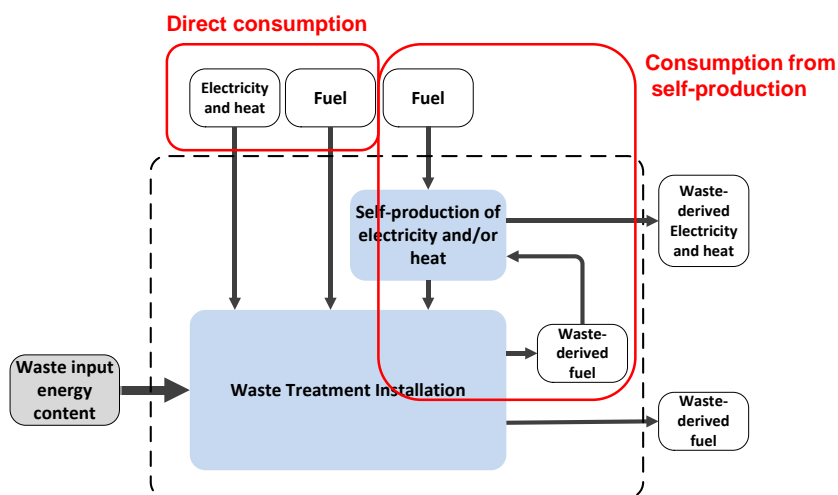
- Energy intensity
- Energy recovery efficiency (waste-derived)
- Material intensity
- Material recovery efficiency (waste-derived)
- Land occupation

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Energy intensity

- Total yearly consumption (MWh/yr)
- Specific consumption (MWh/Mg waste input)



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Specific consumption (MWh/Mg waste input)

Proposed questionnaire section

Specific consumption	Unit	Answer
Thermal energy consumption	MWh/Mg	
Electrical energy consumption	MWh/Mg	
Petrol	L/Mg	
Diesel	L/Mg	
Fuel oil	L/Mg	
Natural Gas	m ³ /Mg	
Biogas	m ³ /Mg	
Methane content of the consumed Biogas	%	
others		

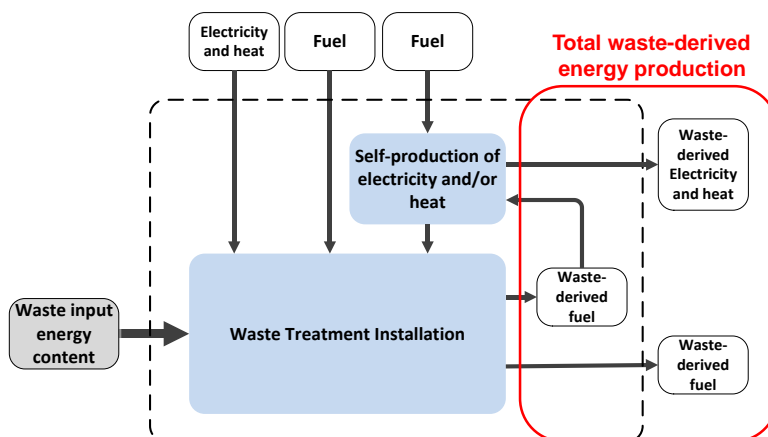
Self-produced energy – both import and waste-derived consumption

Proposed questionnaire section

Self-generated energy	Electricity		Thermal energy	
	Produced energy (MWh/yr)	Quantity fuel used (kg, m ³)	Produced energy (MWh/yr)	Quantity fuel used (kg, m ³)
Fuel type				
Coal				
Fuel oil				
Natural Gas				
Biogas				
Other				

Energy recovery (waste-derived)

- Total yearly production (MWh/yr)
- Specific production (MWh/Mg waste input)



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Specific production (MWh/Mg waste input)

Proposed questionnaire section

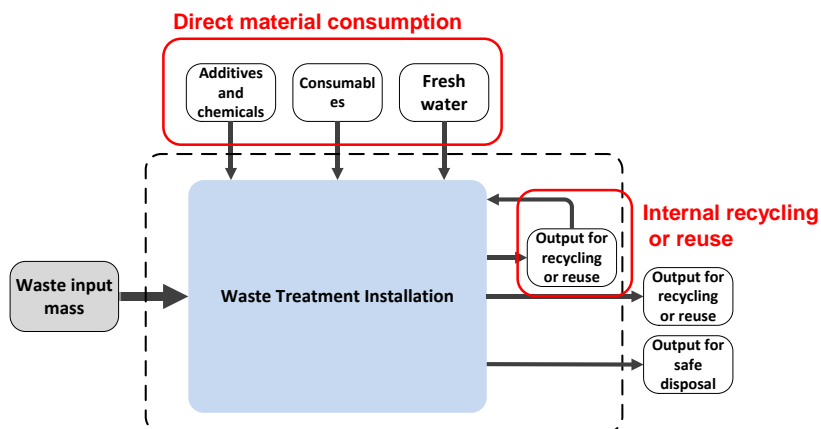
Specific production	Unit	Amount	Destination
Calorific value of the input waste	KJ/kg		
Thermal energy production	MWh/Mg		
Thermal energy exported	MWh/Mg		
Electrical energy production	MWh/Mg		
Electrical energy exported	MWh/Mg		
Biogas production	m ³ /Mg		
Methane content of the produced Biogas	%		
Other waste derived fuel	Mg/Mg		
Calorific value of the waste derived fuel	KJ/kg		

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Material intensity

- Total yearly consumption (MWh/yr)
- Specific consumption (MWh/Mg waste input)



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Specific consumption (Mg/Mg waste input)

Proposed questionnaire section

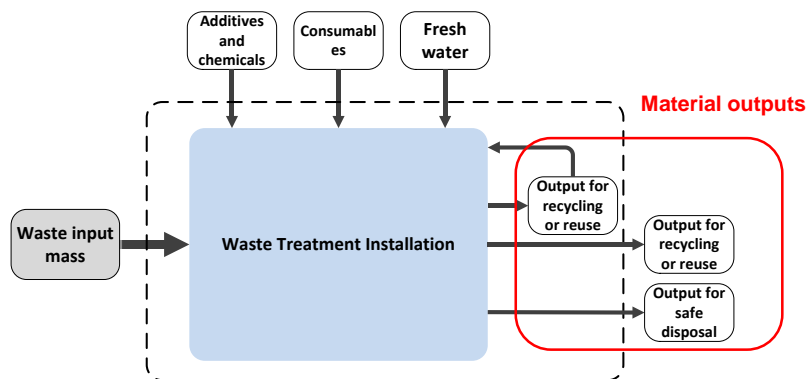
Specific consumption	Unit	Amount	Type	Purpose
Additives	Mg/Mg			
Other chemicals	Mg/Mg			
Other consumables	Mg/Mg			
Fresh water	L/Mg			

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Material recovery (waste-derived)

- Total yearly production (MWh/yr)
- Specific production (MWh/Mg waste input)



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Specific production (Mg/Mg waste input)

Proposed questionnaire section

Specific production	Amount	Main parameters	Destination
Main product outflows			
By-products			
Residue streams			

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Land occupation efficiency¹

- **Measures efficient use of space**
- **Expressed as area used per unit capacity (m²/Mg)**

¹European Resource Efficiency Scoreboard - Productivity of built-up areas