

Valorizing Plastic Waste into Chemicals & Energy Carriers

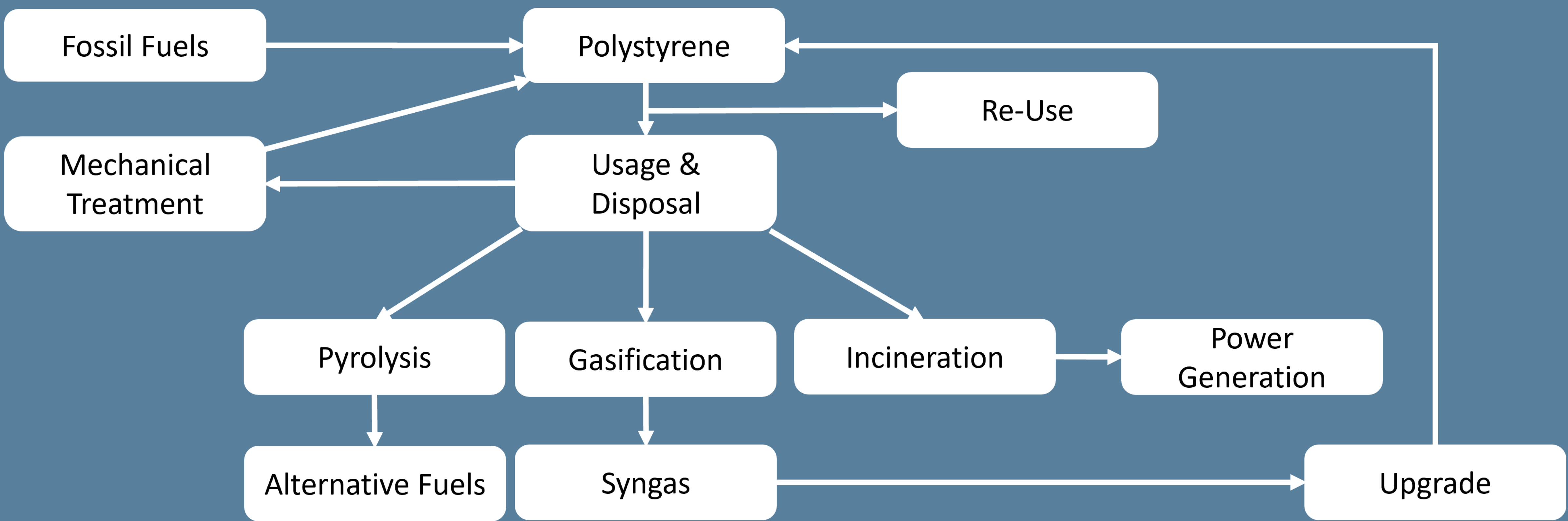
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Abstract

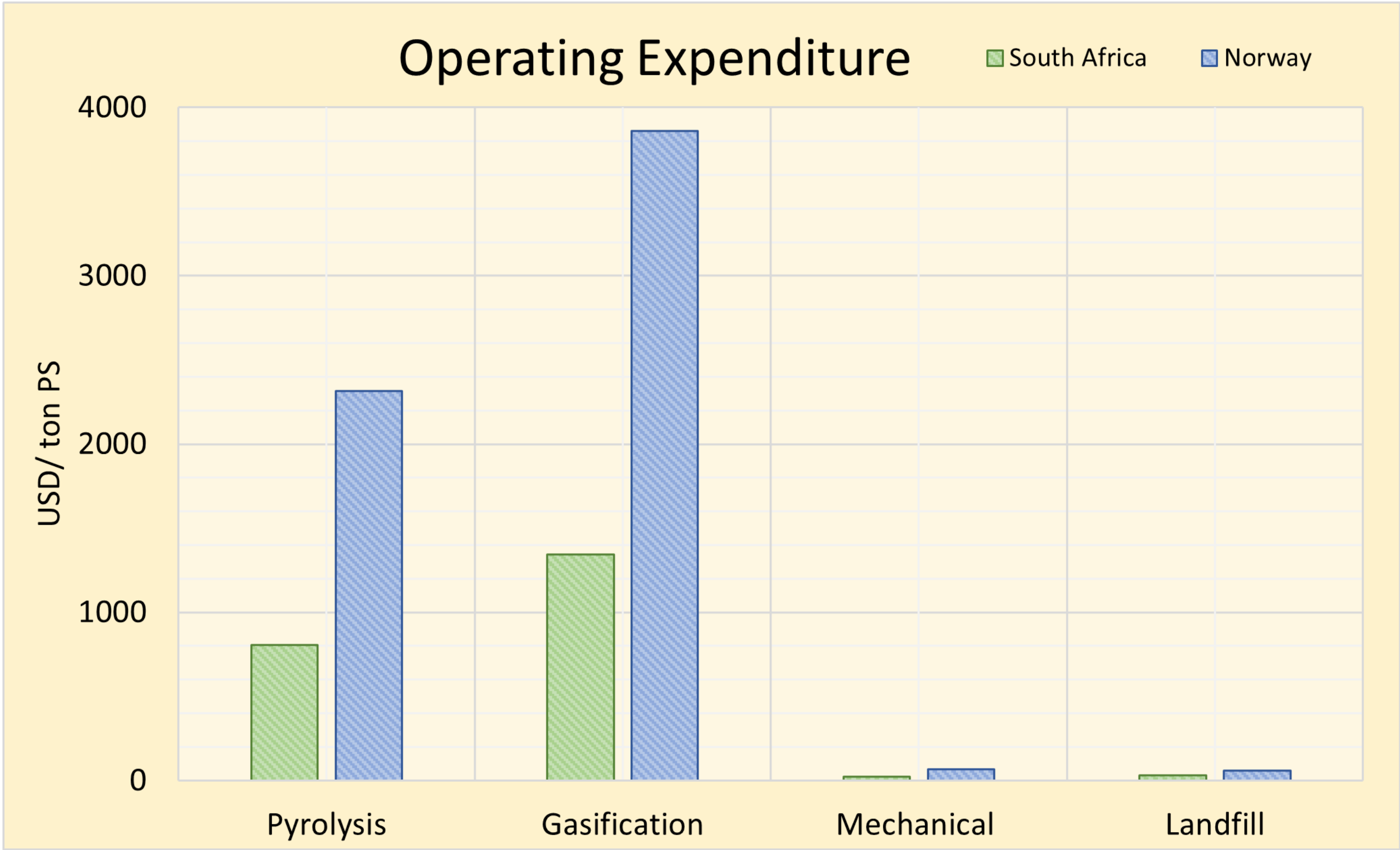
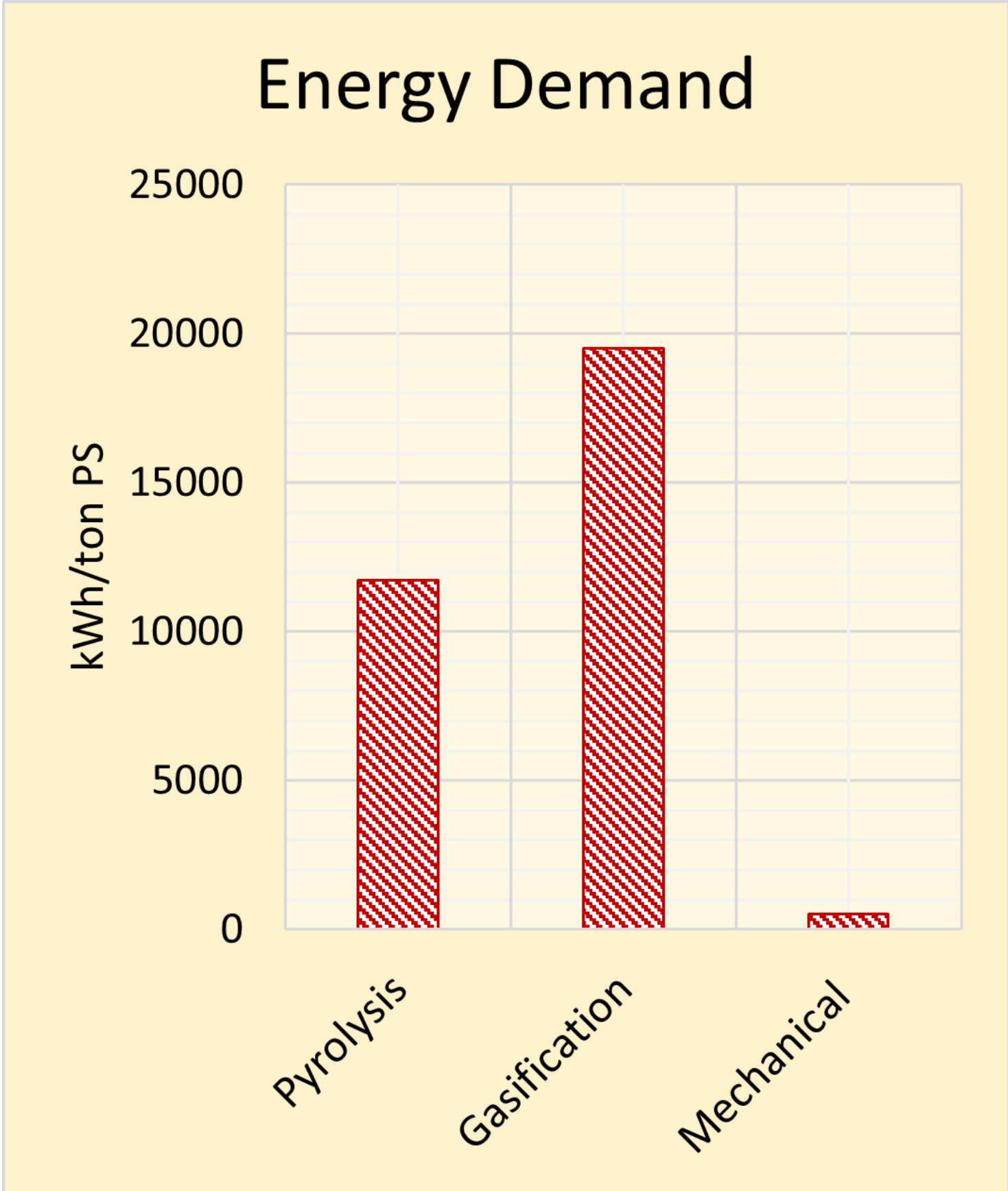
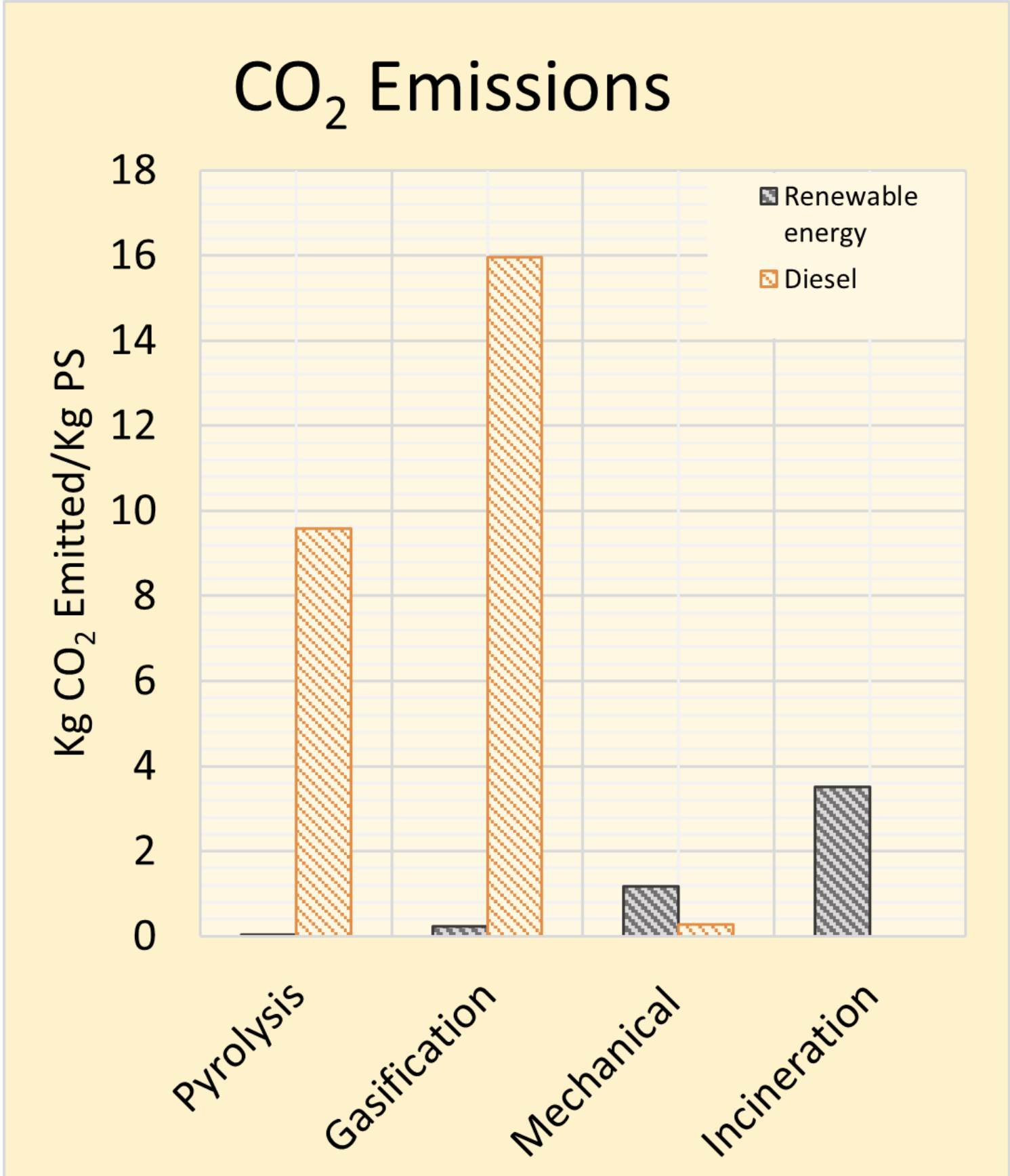
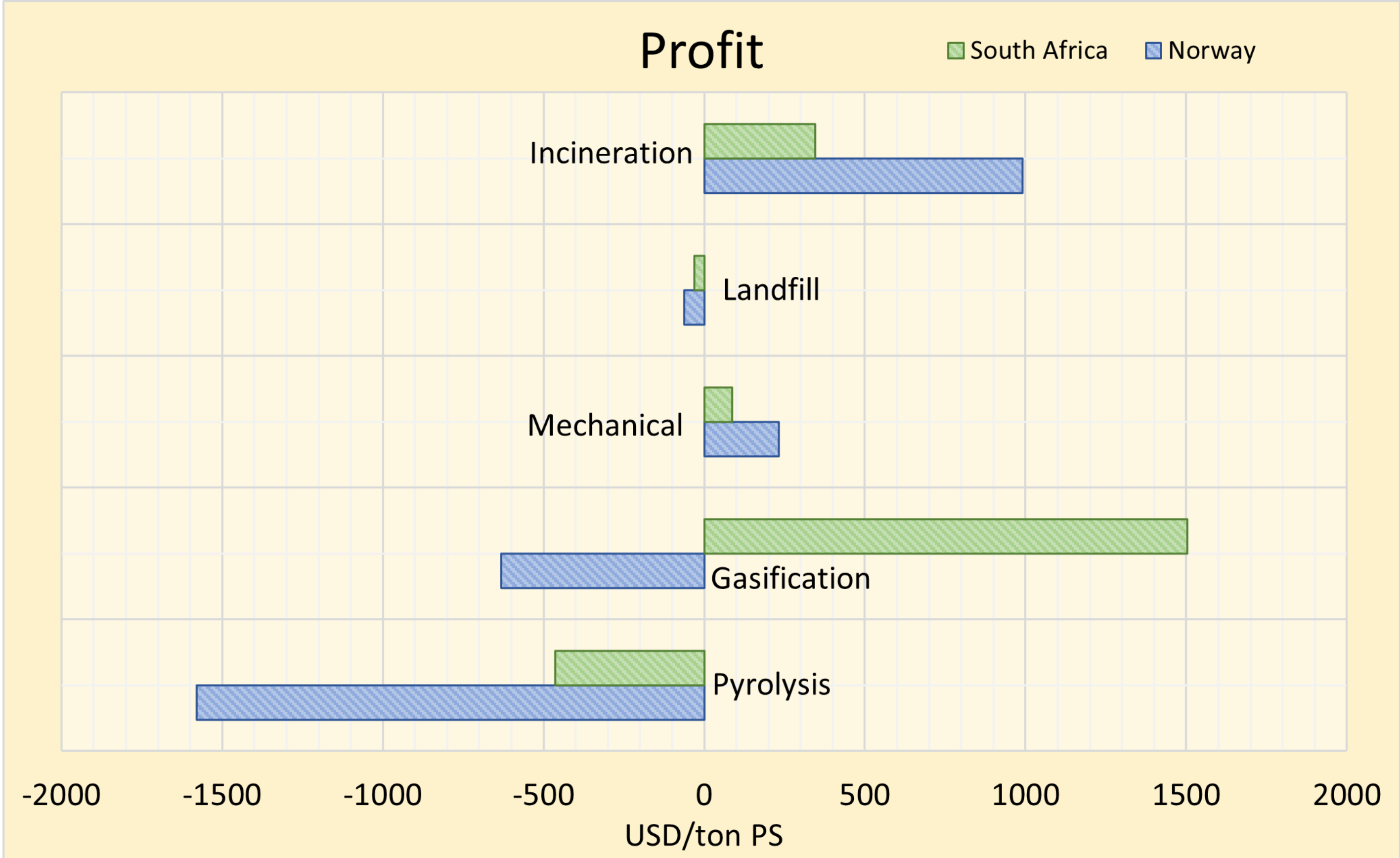
Aim: Navigating the challenges and routes to valorizing plastic waste

Objective: Analyze and assess the various recycling methods for polystyrene and evaluate their feasibility in both Norway and South Africa.

Theory



Findings



Conclusions

- Incineration is most profitable in Norway (currently implemented)
- Gasification is most profitable in South-Africa (currently un-implemented)
- Using renewable energy, pyrolysis and gasification emit less CO2 than incineration.
- Other plastics may be valorized by following the blueprint

