

FLIE EVENT – Case Ducor

8 december 2021



CONTENT

- Ducor Petrochemicals B.V.
- Energy Consumption & CO₂ emissions
- Case Study Ducor

Case Presented by

Rens van Leuken

Operations Manager Ducor rens.vanleuken@ducorchem.com



Ducor Petrochemicals B.V.

Producer of Polypropylene, situated in Botlek (Rotterdam) Fully owned by Carmel Olefins Ltd (Bazan Group)

We focus on long-term partnerships, working together closely with our clients to create tailor-made products.



Polypropylene Producer & Solution Seller www.ducorchem.com

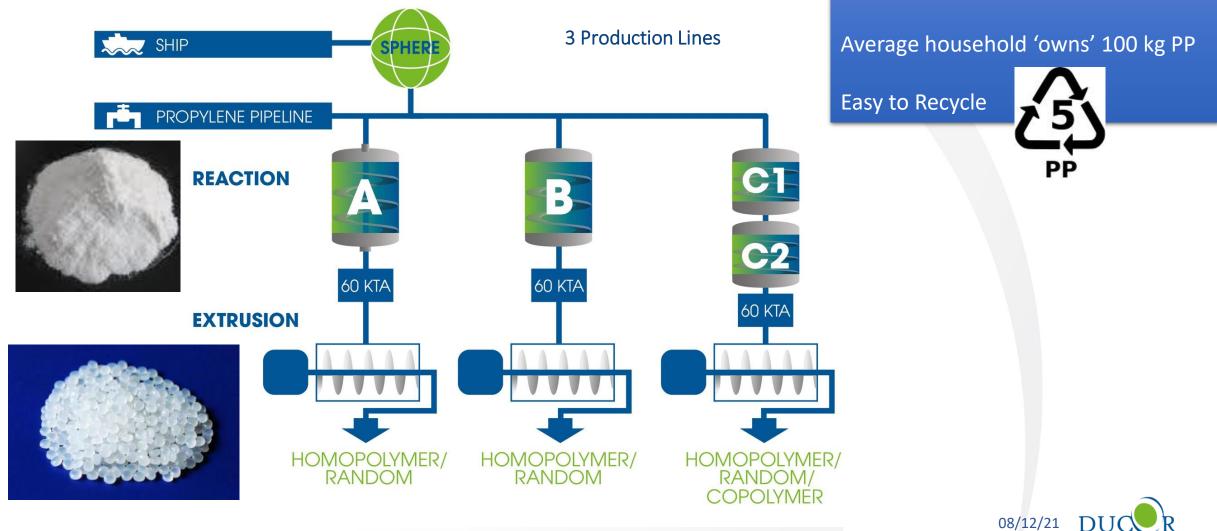


Process Overview

Polypropylene (PP) Dutch consumption ~ 400 kton/yr

4

Petrochemicals



Excess of Heat gives opportunity for energy optimization and CO₂ reduction

Energy Consumption (yearly, reference 2020):Electricity66 GWhSteam41 kton

Average duty Cooling Water Tower is 24 MW \rightarrow <u>Opportunity</u>

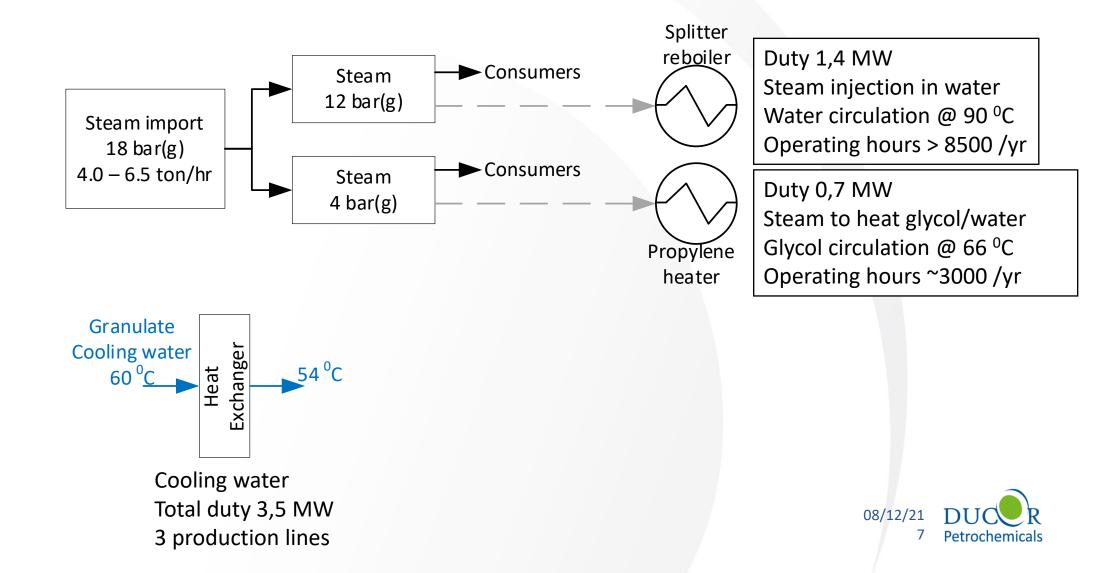
CO₂ emissions:

Total $0.7 \text{ ton } CO_2 / \text{ ton } PP$ Electricity (indirect) $\sim 35 \%$ Steam (indirect) $\sim 50 \%$ Flare gases (direct) $\sim 15 \%$

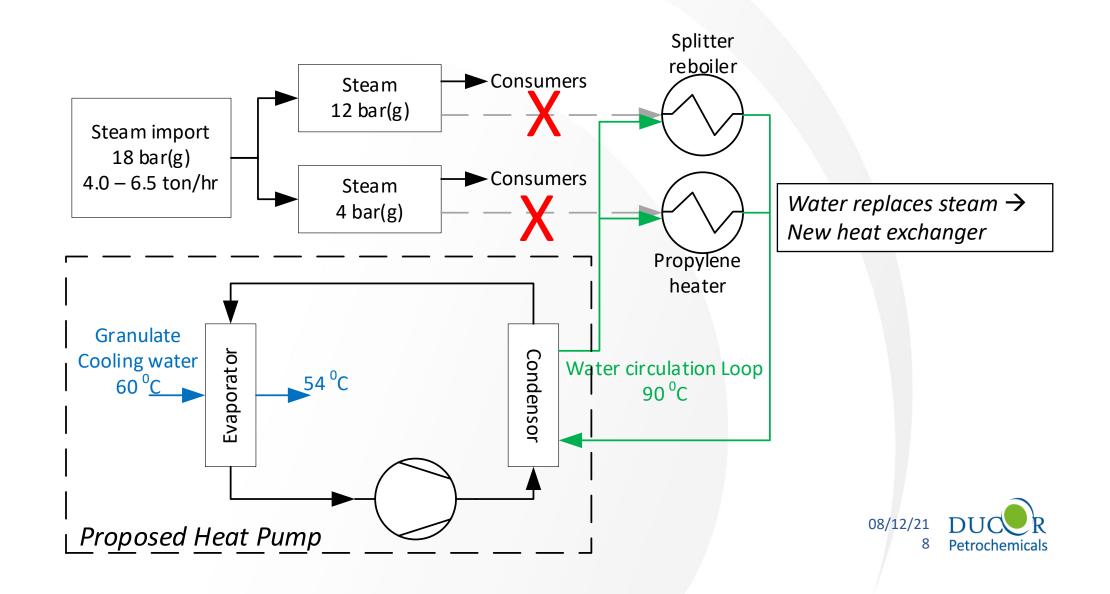
Ducor is fully committed to significantly reduce its environmental impact



Ducor Case



Ducor Case – Alternatives for Heat Pump with payback time of 7 years?





ANY QUESTIONS?