TECHNOLOGY FACTSHEET



	ΜΕΤΗΔΝΟΙ ΤΟ ΡΡΟΡΥΙΕ													
	Date of factsheet	13-9-2021												
	Author	Carina Oliveira												
Proc No. Image: Im	Sector	Industry: Petrochemica	ais											
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Interfactor 	Description	Alternative chemicals production The methanol-to-propylene (MTP) process converts methanol to propylene. Methanol is directed to a first reactor, known as dimethyl ether (DME) reactor, where methanol is converted to DME and water. This stream is fed to another reactor which converts the DME into propylene. This second reaction step takes place on a zeolite-based catalyst (ZSM-5) in a fixed bed reactor which is different from the methanol-to-olefins (MTO) process. Also, the MTP [®] process can deliver LPG and gasoline as byproducts, which is not the case for the MTO technology. One important element of the MTP [®] process is the selective catalyst that is able to convert most of the methanol to propylene. Due to coke formation in the second reaction section, this step is normally executed in three reactors that operate in parallel. The coke formation results in carbon losses of less than 5%wt (Rothaemel, M. et al., 2016). One of them is kept in stand-by mod to remove the formed coke by introducing air.											converted to ed bed reactor gy. One in, this step is stand-by mode	
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Emissions explanation OTHER	its LHV value were considered to be production emissions are outside th	106.8 kg CO2/I e scope of this	MJ and 28.5 MJ factsheet.	J/kg, respective	ely (RVO, 2017)	. The value refl	ects the CO2 e	missions per kt	on of propylene	e produced. The	e utilities	
Parameter	Unit		Current			2030			2050			
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