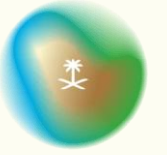


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# TDI

Saturday, January 11, 2025

# TDI complex

	Product	Non captive volume, KTA	Total volume, KTA	Product base case IRR, %	Location	Key Driver
<b>Project economics</b> 	TDI	200	200		Jubail	TDI expected to be driven by Furniture and Automotive sectors
	<b>Total volume</b>	<b>200</b>	<b>200</b>			

## Value chain



Integrated case
x Raw Materials
 end products
→ Sold to market
 xx Captive capacity
 xx Non-captive capacity

### Raw Materials



Toluene

128

### DS End-products

TDI

200

## Exemplary players

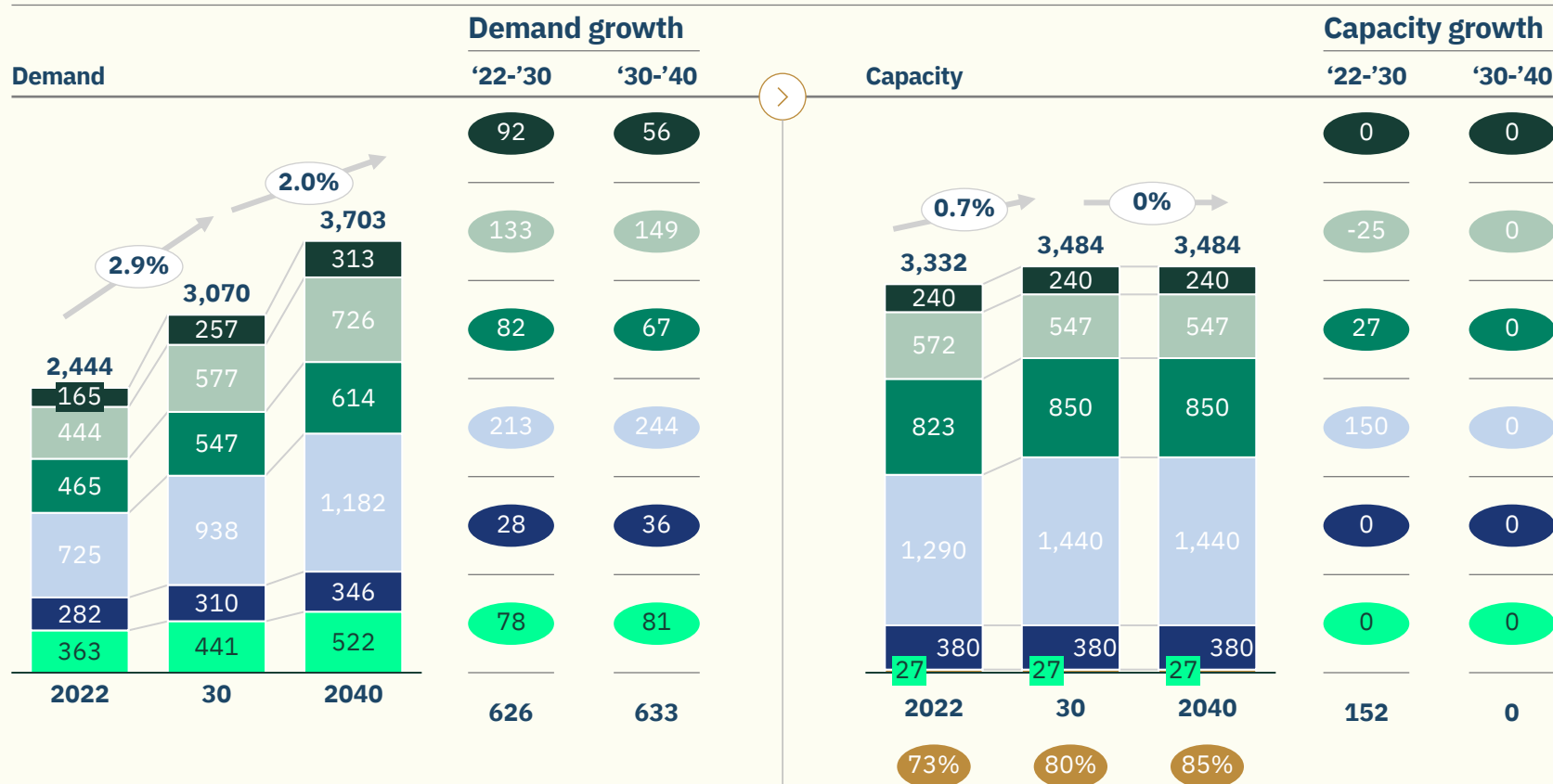


# KSA can target ~200 KTA for TDI, of which ~90 captive in KSA and rest for export to Asia and Europe

xx% Estimated Utilization rate, %

■ Middle East<sup>1</sup>
■ Europe
 ■ North America  
■ Asia<sup>2</sup>
■ China
 ■ RoW

## Global TDI demand / capacity, KTA



## Key takeaways

Addressable demand<sup>3</sup> of ~405 KTA mainly in Middle East, Asia, Europe, and China

Target demand based on KSA position in the cost curve is 305 KTA in:

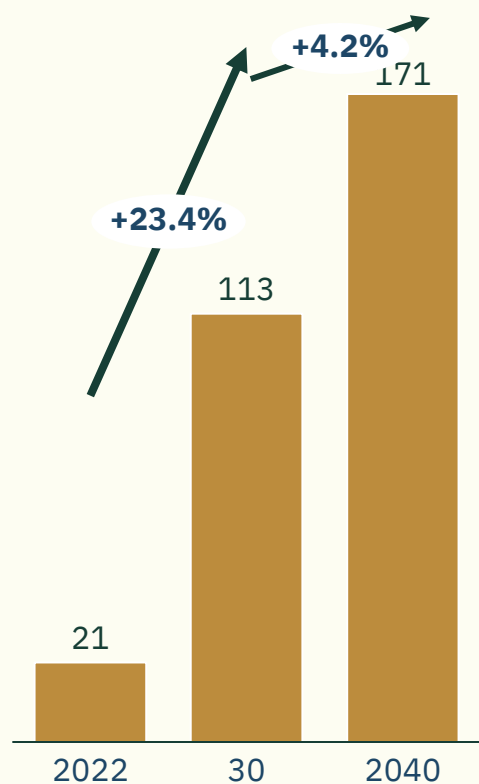
- Middle East: 92 KTA
- Asia: 158 KTA
- Europe: 55 KTA

KSA could install a **world scale plant of 200 KTA**, corresponding to 56% capture rate of target demand in Middle East, Asia and Europe

1. Includes Iran, Israel, Kuwait, Oman, Qatar, KSA, Syria, UAE, Turkey | 2. Excluding China | 3. Calculated as demand growth – capacity growth if demand growth > capacity growth, otherwise 0 (except for Middle East, where KSA growth can always be captured)

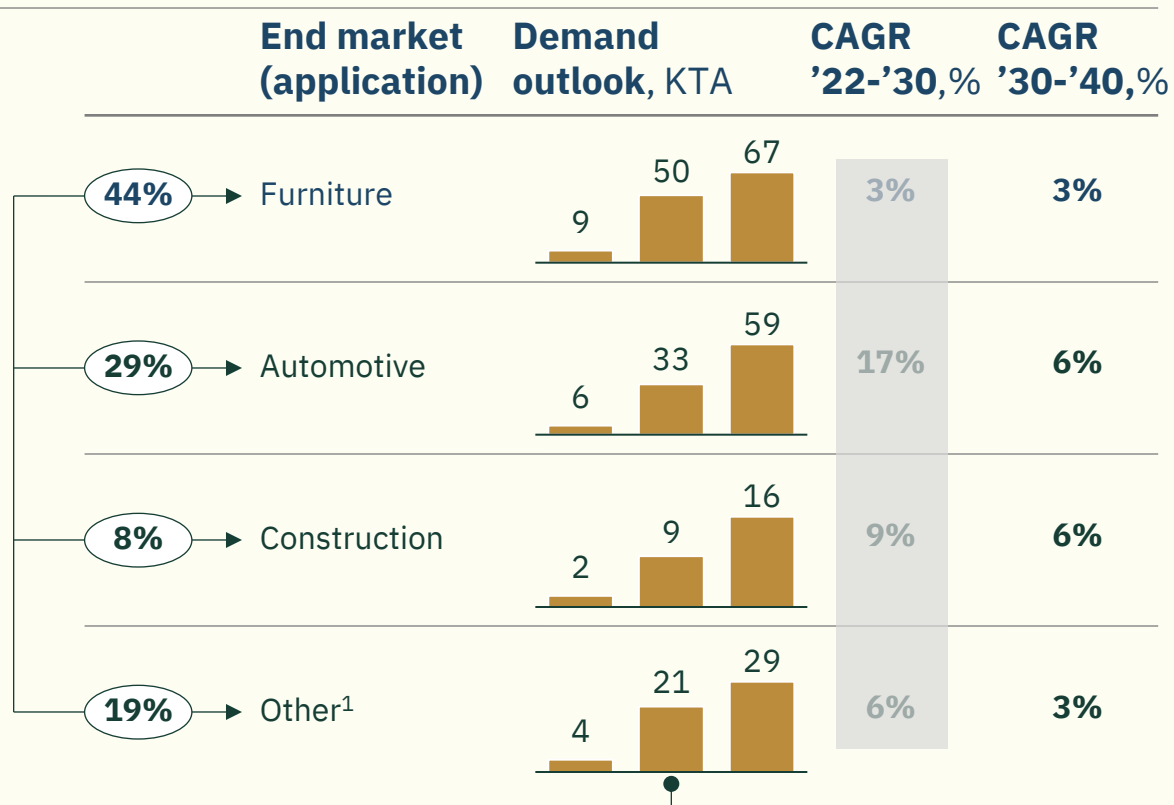
# KSA demand growth for TDI expected to be driven by Furniture and Automotive sectors

## KSA TDI demand projection, KTA



Applied to the end product (i.e., polyurethane) (xx%) Share of demand covered by the application<sup>2</sup>, %

## Demand drivers



2030 demand is driven by +520 KTA of polyurethanes installed in KSA

## Key takeaways

**KSA represents ~1% of global demand** and expected to grow at **23.4% CAGR by 2030**

**Afterwards** the growth may slow down to **4.2% CAGR**

**Key drivers** of growth in KSA is the **installation of 4 unit of 130 KTA each of polyurethanes** (total new capacity is 520 KTA). Flexible polyurethanes, grade where TDI is used, demand is driven by:

- **Furniture** industry, with a 3.0% CAGR between 2022-30
- **Automotive** industry with a 17% CAGR '22-'30
- **Construction** industry with a 6% CAGR '22-'30

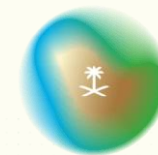
**Size of the local market makes TDI an export-oriented investment case**

1. Includes use as in industrial manufacturing, textiles, and packaging | 2. Middle East share

Source: Internal analysis

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**Thank You**