

# IEF - KAPSARC KSA Energy Balance

## Key takeaways and improvement opportunities

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Energy Data Transparency, and Energy Policy Scenario Models

**Energy Security** Through Dialogue

# Highlights on the 2021 update

## Key data taken from KAPSARC models

- Natural gas / gas liquid feeds to the petrochemical industry and its energy and non energy breakdowns
- Oil consumption by other industries (notably cement)
- Transportation fuel consumption

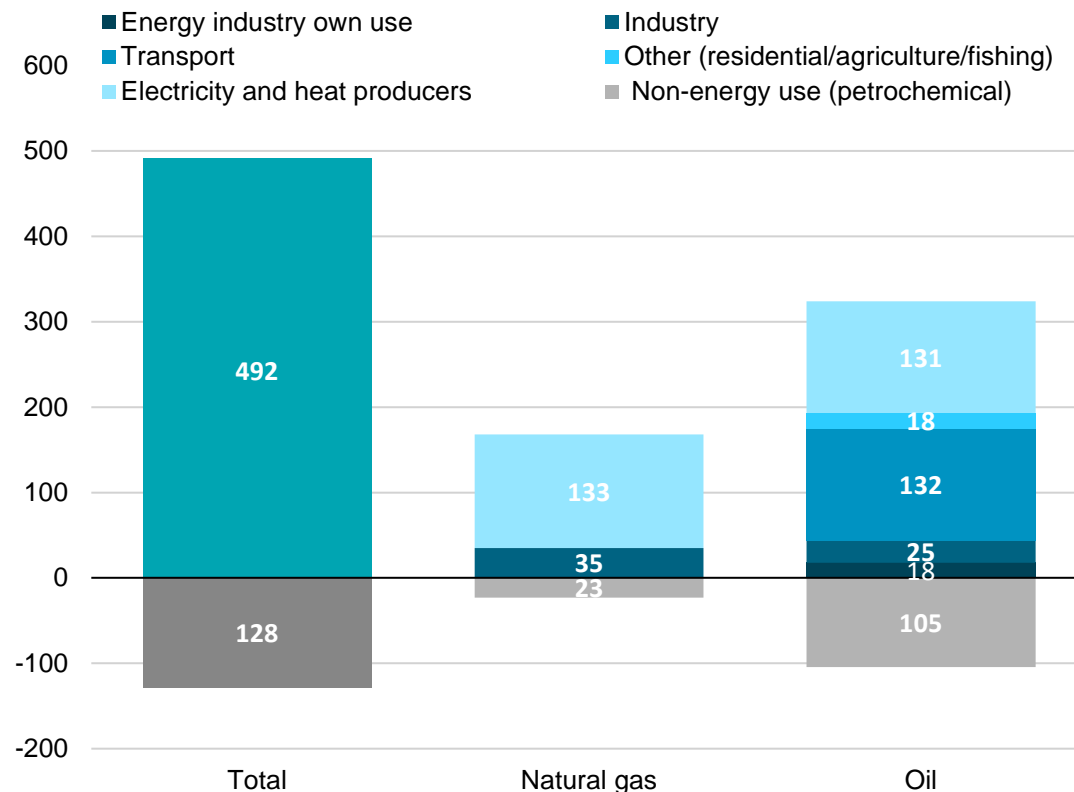
## Data requiring interpretations

- Transformation and consumption of Naphtha (NGLs / natural gasoline)
- Other kerosene and Jet kerosene breakdown
- Other oil product breakdowns
- Electricity trade
- Power generation by energy source  
(likewise last year, it was estimated based on inputs)

# Conversion to CO<sub>2</sub> emissions

## 2019 CO<sub>2</sub> Emission from hydrocarbon - Saudi Arabia

Mt of CO<sub>2</sub>



Source: IEF, KAPSARC

- Based on 2006 IPCC Guidelines for National GHG Inventories
- Only CO<sub>2</sub> emissions without accounting carbon sequestrations
- *Mass to energy and energy to CO<sub>2</sub> conversions were made based on standard conversion factors*

# Key takeaway and improvement opportunities

## Key takeaways

- Again with 2019 data, the consolidation of various official data balances within 5% differences
- Major revisions on petrochemical feeds (both energy and non-energy)
- Granular transportation fuel consumption

## Improvement opportunities

- Oil products balance
- Country specific conversion factors (esp. mass to energy conversion)
- Details on carbon capture and usage (KSA is home to some of the largest CCUS facilities)
- Details on power generations and consumption



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