



# Iron&Steel data: IEA's perspective

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OECD Global Forum on Steel Excess Capacity 21 September 2022

# Iron&Steel – integrated process. Representation in IEA Energy balance

Units:TJ

SUPPLY AND CONSUMPTION	Coking coal	Other bituminous coal	Lignite	Coke oven coke	Gas works gas	Coke oven gas	Blast furnace gas	Natural gas
<b>Total energy supply</b>	<b>406317</b>	<b>4098448</b>	<b>627650</b>	<b>-14721</b>	-	-	-	<b>30104803</b>
<b>Transformation processes</b>	<b>-423937</b>	<b>-3390808</b>	<b>-635602</b>	<b>105963</b>	-	<b>37144</b>	<b>55476</b>	<b>-12225024</b>
Blast furnaces	-	-15545	-	-165137	-	-	72286	-
Coke ovens	-423937	-	-	271100	-	40685	-	-
<b>Energy industry own use</b>	-	<b>-309</b>	-	-	-	<b>-17347</b>	<b>-15903</b>	<b>-2745975</b>
Blast furnaces	-	-	-	-	-	-4163	-15585	-10120
Coke ovens	-	-	-	-	-	-13183	-318	-
<b>Total final consumption</b>	-	<b>289141</b>	<b>4841</b>	<b>91242</b>	-	<b>19801</b>	<b>39573</b>	<b>14924939</b>
Industry	-	283364	4841	91242	-	19801	39573	5696587
<b>Iron and steel</b>	-	<b>7895</b>	-	<b>91242</b>	-	<b>185</b>	<b>39573</b>	<b>391757</b>
Non-ferrous metals	-	-	-	-	-	-	-	138932
Transport	-	-	-	-	-	-	-	1040103
Residential	-	-	-	-	-	-	-	4602910
Commercial and public servic	-	5777	-	-	-	-	-	3121795

## Transformation

Fuels transformed into another energy form

## Energy Industry Own Use

Fuels consumed to support operations

## Final Consumption

Fuels consumed to provide energy in final processes

Data relevant to iron and steel: within **energy sector**, **transformation sector**, **final consumption**.  
Energy balances are elaborated based on annual fuel data submissions from **national administrations**  
**according to internationally agreed methodologies.**

1. **Confidentiality issues**: more disaggregated values might face confidentiality issues
2. **Lack sub-sectoral disaggregation**: Not all countries can provide full disaggregation for the industry sector (or for all the fuels) and they allocate the energy consumption to “*non-specified industry*”. Need for systematic surveys.
3. **Difficulties to break down energy consumption**: if a transformation process is reported (coke oven and/or blast furnaces) also Energy Industry own use for the same processes should be reported (or split inaccurate)!
4. **Lack of data by process**: the energy balance doesn't cover the disaggregation by technology. With the Energy Efficiency Indicators data collection of the IEA this aspect was covered disaggregating the energy consumption for BOF and EAF to have more accurate indicators. Countries are not able to report this kind of disaggregation
5. **Need for additional information outside energy statistics for targeted metrics** (eg. imports of semi-finished materials): IEA produces aggregated indicators (for instance emissions - or energy- per tonnes of finished products), however targeted analysis requires to take into account trade of semi-finished materials.



1. **Fine technology analysis** requires rather disaggregated information.
2. Need to emphasise **importance of primary data collection at national level** (including suitable legislation) to **support policy decision** (cost of not having appropriate data may be very high).
3. Adoption of **comparable, internationally agreed methodologies** (IRES, IPCC, ISIC) – boundaries, products definitions, etc.
4. It is important to **engage with industry sector / government statistics for data sharing** – including how to address confidentiality issues.
5. **Need of collaboration across different data domains** (energy, production, trade, environment etc.)

**IEA stands ready to collaborate to strengthen data globally**

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