

White Goods, Electronics & HVAC Industry in Turkey

Foreign Market Consulting Ltd. Sti
Istanbul

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FMConsulting prepares market snapshot reports from selected trusted sources in Turkey which are regularly updated. These reports are brief presentations overviewing available facts & figures on major industries in Turkey. If you need a specific research on different segments, please contact with our Head of Market Research Department Mrs. Berna Gurleyen (b.gurleyen@fmconsulting.com). We would be happy to support you.



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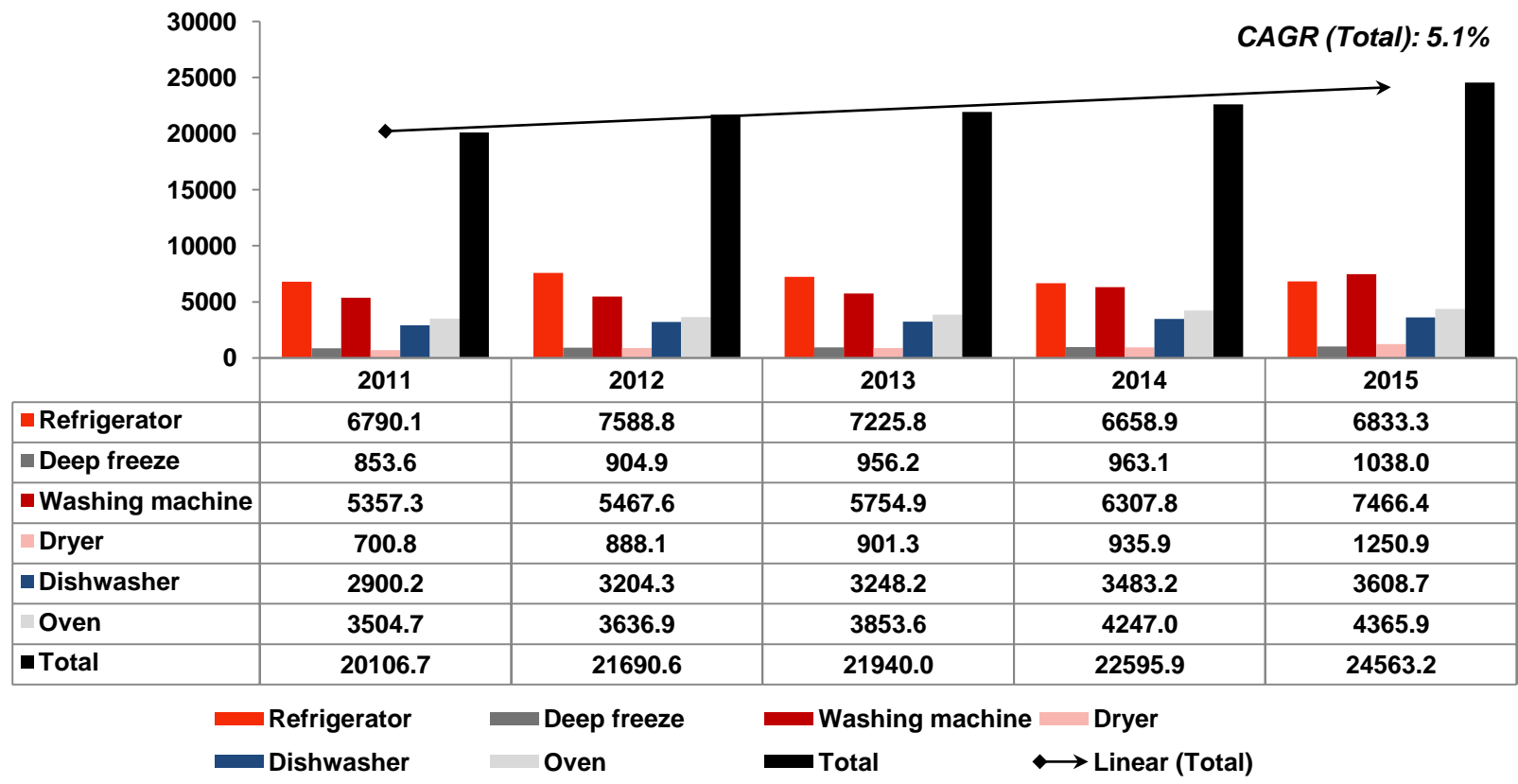
► Overview

- Large scale Turkish and foreign manufacturers: **Arcelik, Vestel, BSH, Indesit, Candy Hoover**
- **90-95%** of the domestic market is covered by 6 big manufacturers. In addition, more than **50** medium sized manufacturers, **500** parts & components manufacturers, **12,000** dealers, **1,500** technical services (Source: Ministry of Science, Industry and Technology, 2014)
- **130,000** employees (Source: Social Security Institution, 2016)
- Largest production capacity in Europe: **25 mn** units. (Source: White Goods Manufacturers' Association (TURKBESD) & White Goods Suppliers Association (BEYSAD), 2016)
- Export oriented growth. Exports/Production (2015): **74%** (Main destination is the EU) (Source: White Goods Manufacturers' Association (TURKBESD) & White Goods Suppliers Association (BEYSAD), 2016)



A. White Goods

▶ Production ('000 units)

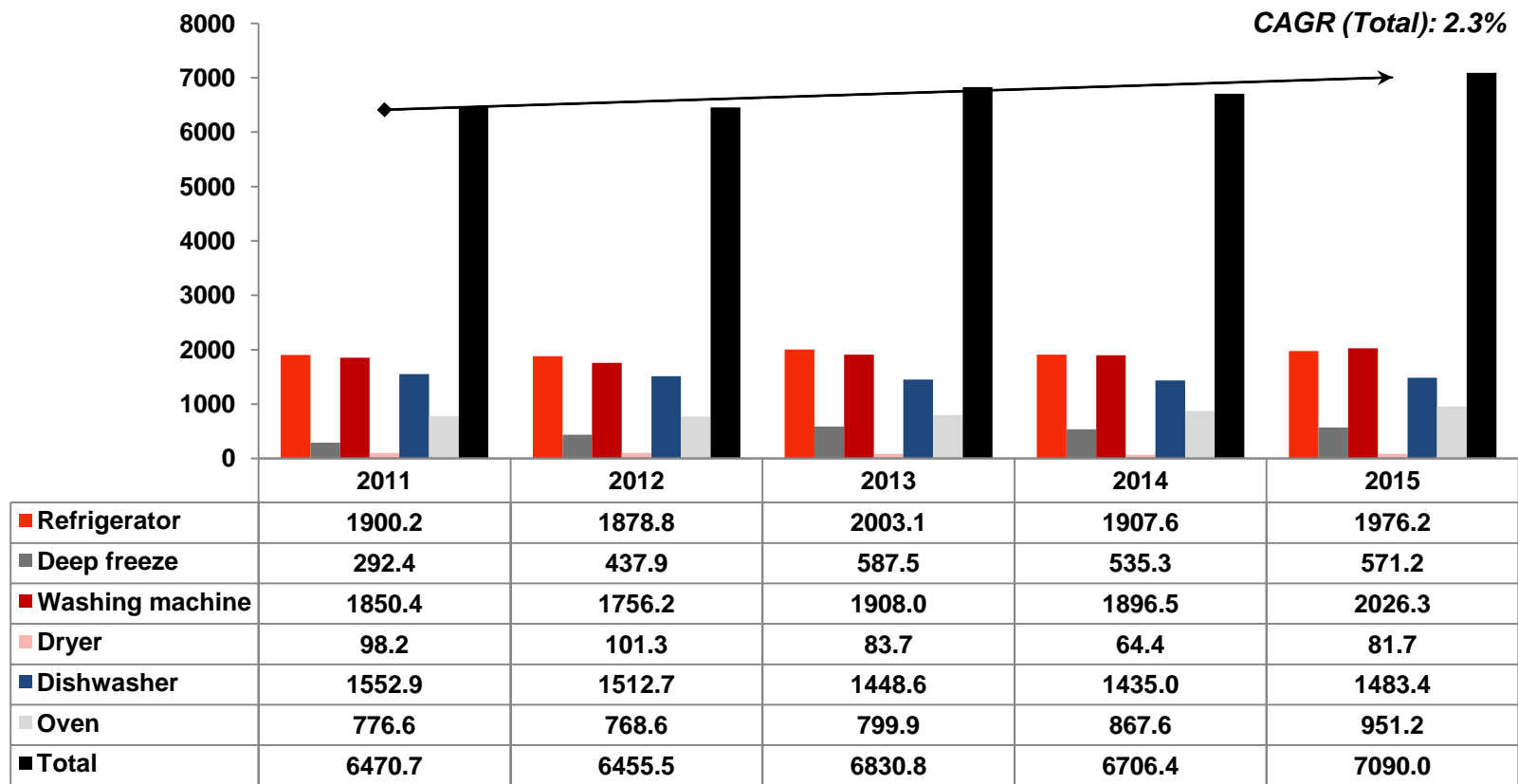


Source: White Goods Manufacturers' Association (TURKBESD) & White Goods Suppliers Association (BEYSAD), 2016



A. White Goods

▶ Domestic Sales ('000 units)

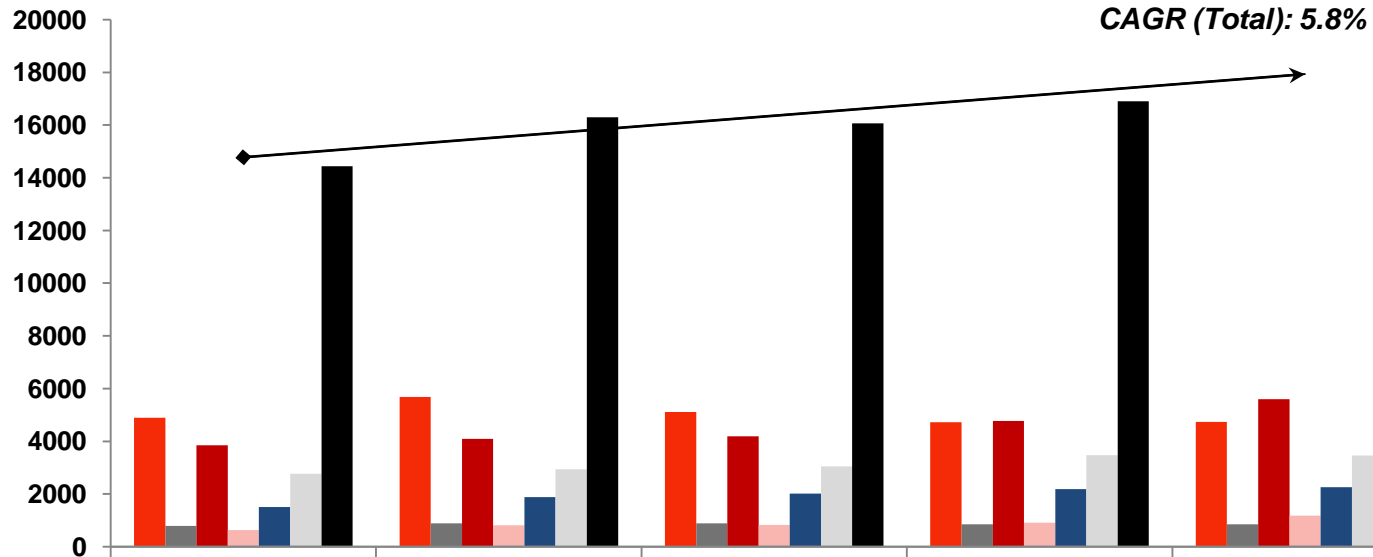


Source: White Goods Manufacturers' Association (TURKBESD) & White Goods Suppliers Association (BEYSAD), 2016



A. White Goods

▶ Exports ('000 units)



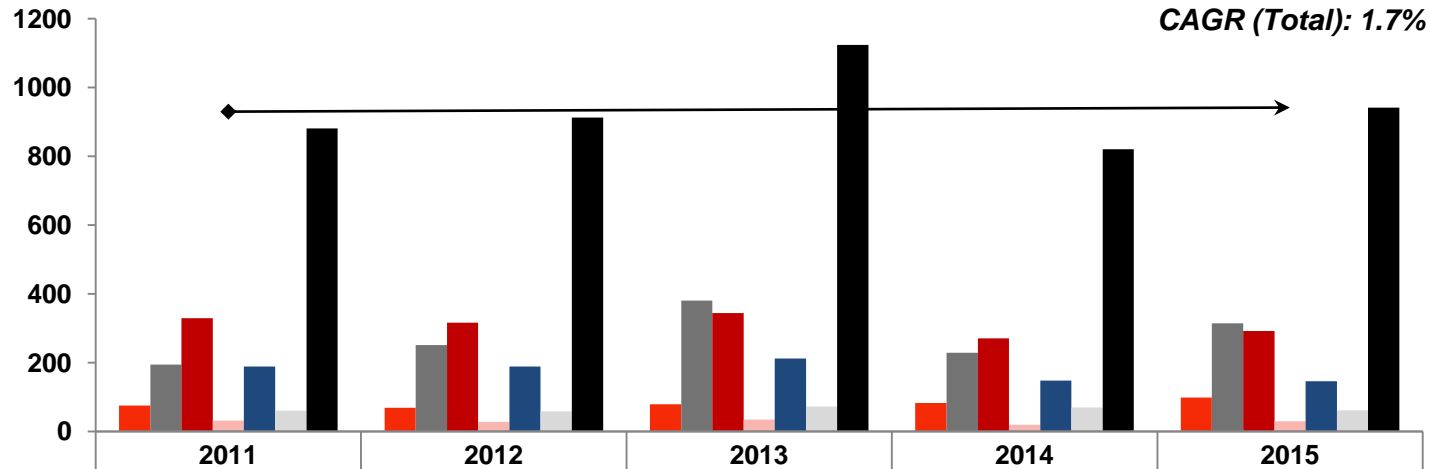
	2011	2012	2013	2014	2015
■ Refrigerator	4887.8	5683.5	5107.7	4723.6	4736.2
■ Deep freeze	789	886.1	880.5	847.1	849.3
■ Washing machine	3854.6	4093.2	4186.8	4766.9	5600.5
■ Dryer	633.8	814.3	821.6	909.3	1180.8
■ Dishwasher	1510.4	1877.9	2020.9	2188.8	2255.8
■ Oven	2765.2	2942.2	3043.9	3467.9	3459.8
■ Total	14440.8	16297.2	16061.4	16903.6	18082.4

Source: White Goods Manufacturers' Association (TURKBESD) & White Goods Suppliers Association (BEYSAD), 2016



A. White Goods

▶ Imports ('000 units)



	2011	2012	2013	2014	2015
■ Refrigerator	75.3	69.3	79.1	83.2	98.3
■ Deep freeze	194.6	251.6	380.0	228.4	314.6
■ Washing machine	329.7	316.3	344.4	270.9	291.7
■ Dryer	31.9	27.9	34.6	19.7	29.5
■ Dishwasher	189	188.8	212.4	148.2	145.7
■ Oven	60.2	58.8	72.8	70.1	61.8
■ Total	880.7	912.7	1123.3	820.5	941.6

Source: White Goods Manufacturers' Association (TURKBESD) & White Goods Suppliers Association (BEYSAD), 2016



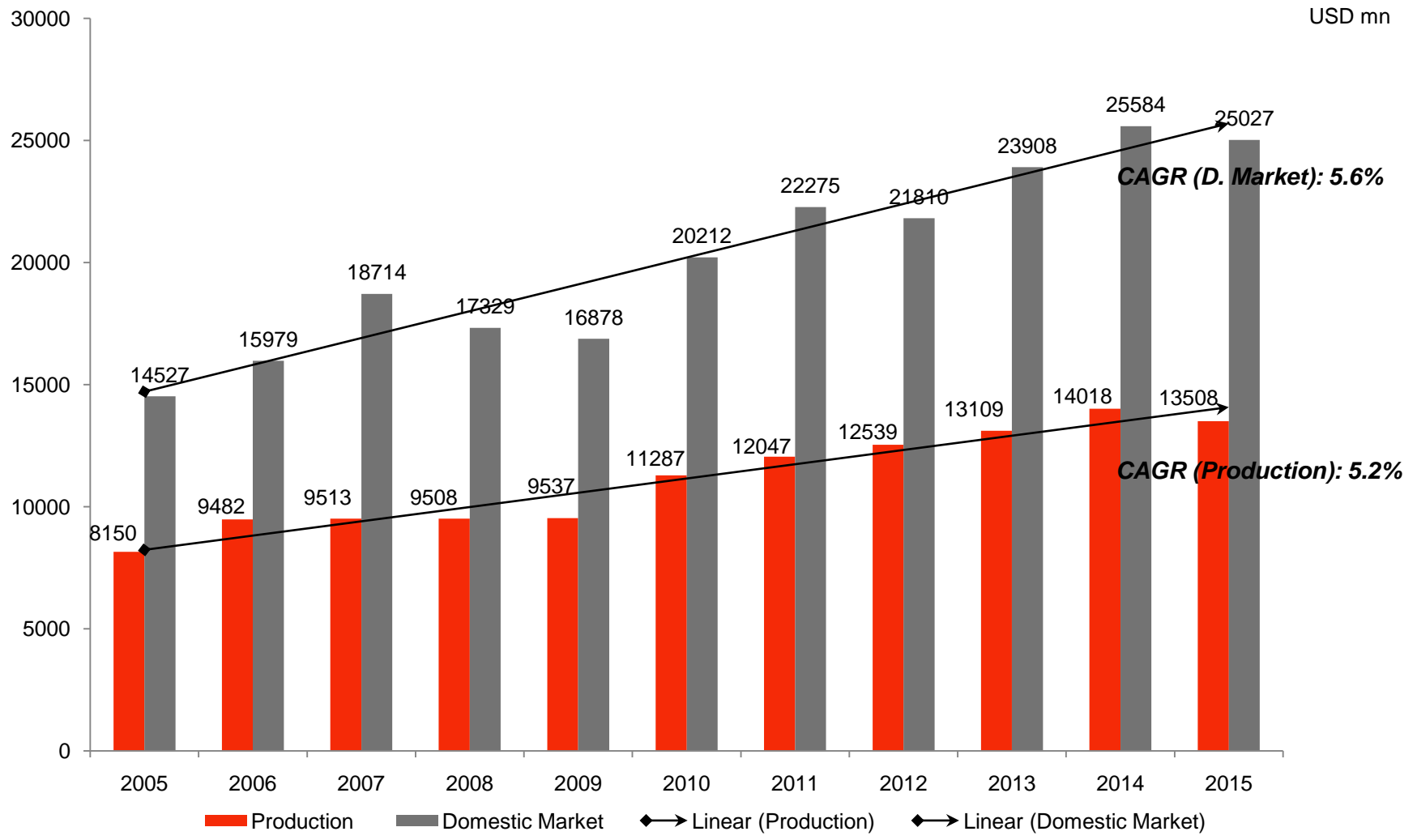
► Overview

- **Vestel** is the TV market leader in Turkey and ranks **2nd** in Europe. (Source: Vestel web site, 2016)
- **USD 13.5 bn** production value, **USD 25 bn** domestic sales, **USD 20 bn** sales in engineering and service. (Source: TESID [Turkish Electronic Industrialists Association] 2016)
- Exports: **USD 5.8 bn** (main market: EU, followed by North Africa-Middle East) (Source: TESID, 2016)
- Imports: **USD 17.3 bn** (main sources: Far East, followed by the EU) (Source: TESID, 2016)
- **50,000** employees in production and **100,000** employees in related engineering and services. (Source: TESID, 2016)
- **USD 280 mn** of R&D expenditures (Source: TESID, 2016)



B. Electronics

▶ Production & Domestic Market

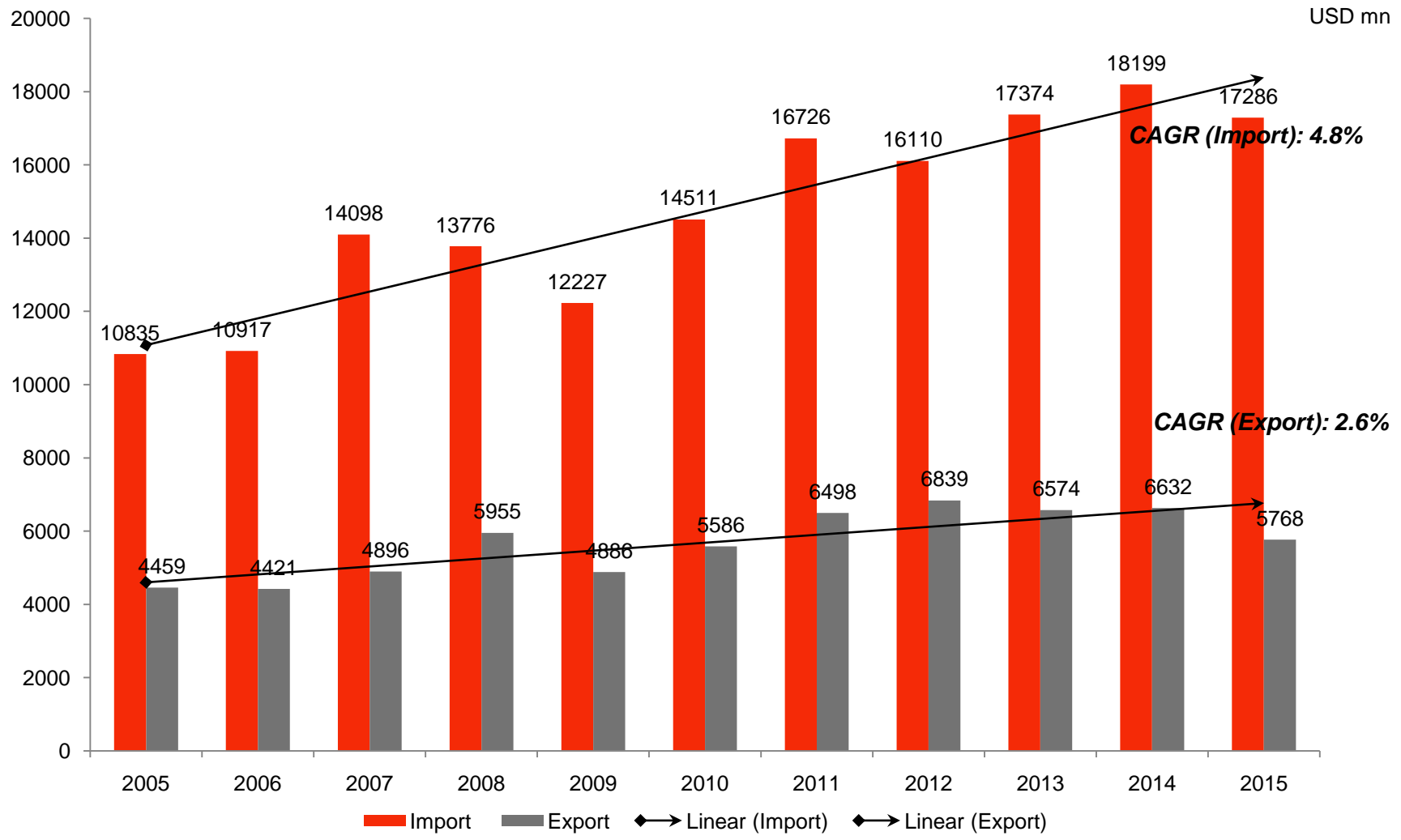


Source: TESID, 2016



B. Electronics

Foreign Trade



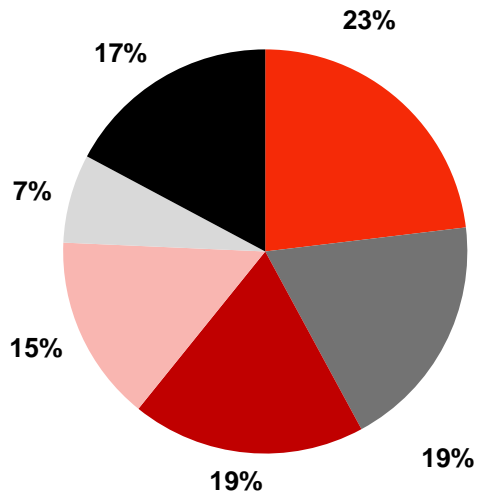
Source: TESID, 2013



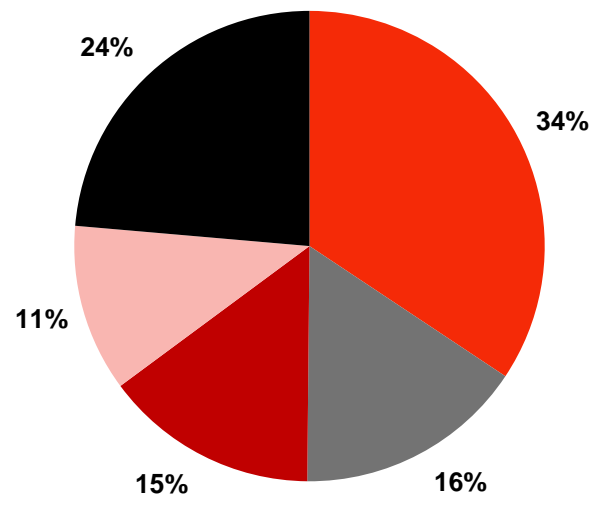
B. Electronics

▶ Segments

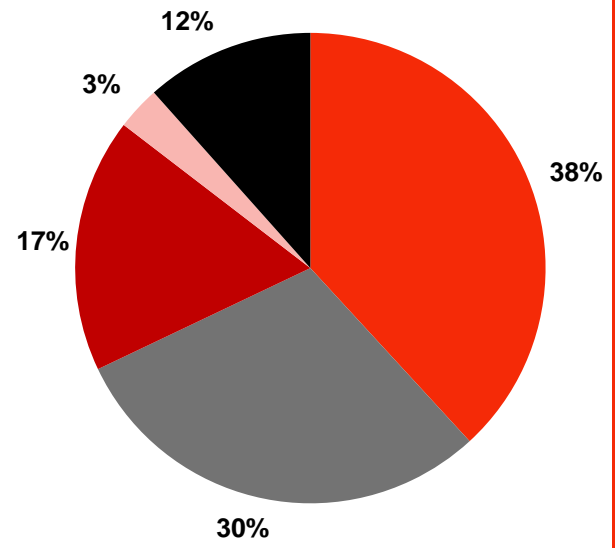
Production



Imports



Exports



- Consumer Electronics
- Computer
- Telecommunication Equipment and Cables
- Defence Electronics
- Components
- Other Professional & Industrial Equipment

- Telecommunication Equipment and Cables
- Computer
- Consumer Electronics
- Components
- Other Professional & Industrial Equipment

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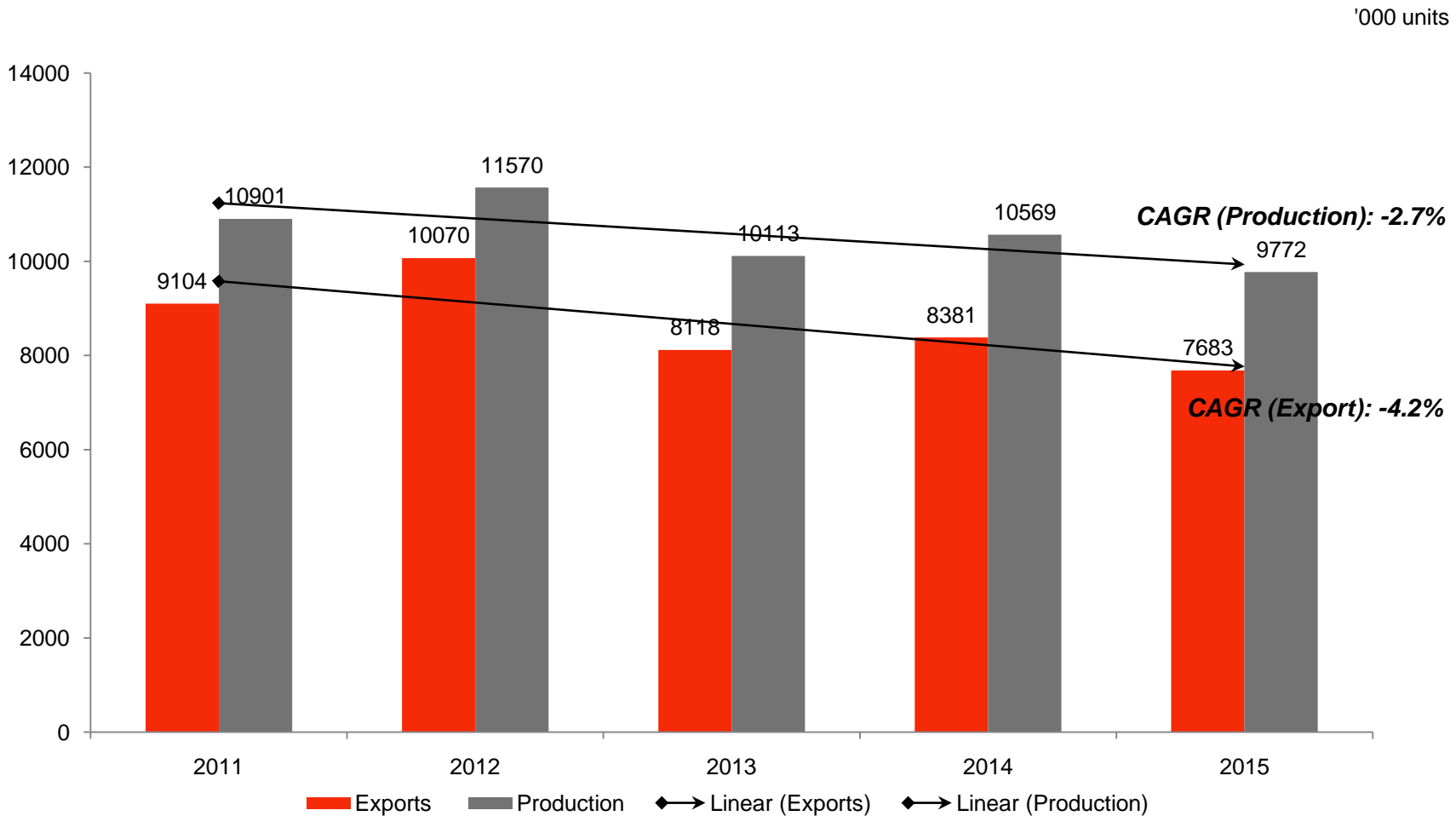
Source: TESID, 2016



B. Electronics

▶ TV Production & Exports

- TV production, which is mainly carried out for exports to the EU, has been in a decreasing trend due to the contracting TV market in Europe and increasing competition from Far East in flat screen.



Source: TESID, 2016



► Overview

Domestic production (units):

- Air-conditioners: **740 thousand** (2015)
- Combi boilers: **1.5 mn** (2014)
- Water heaters: **166 thousand** (2014)

Domestic market (units):

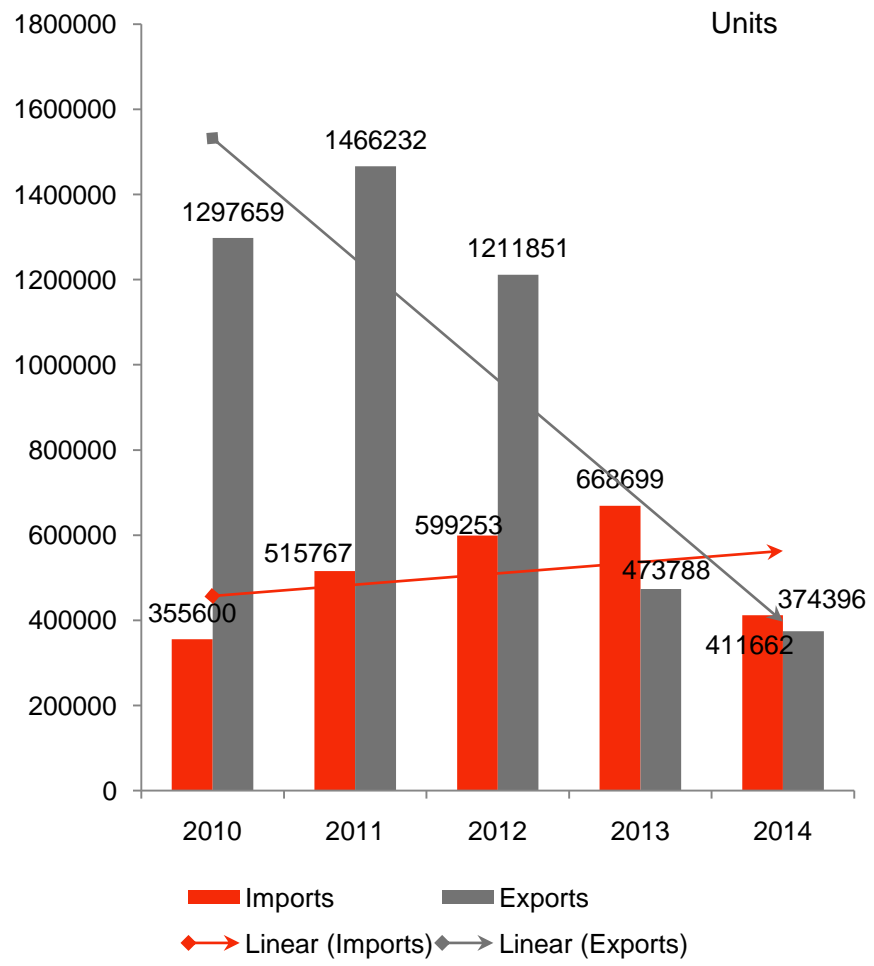
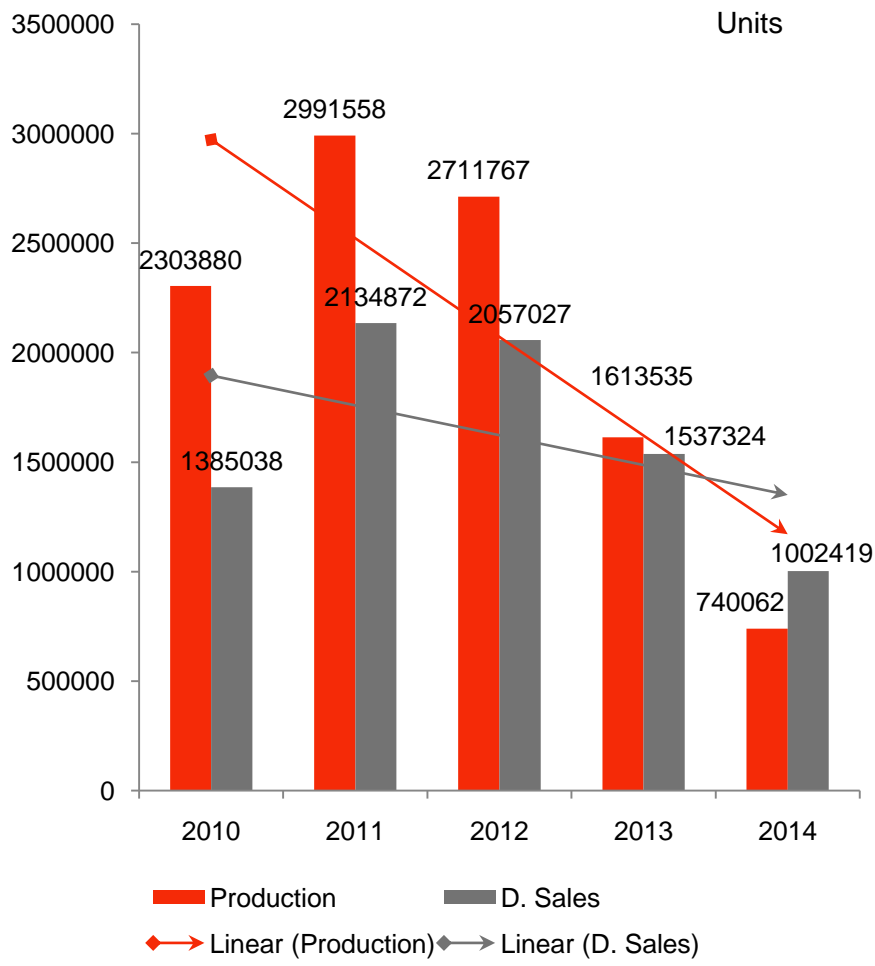
- Air-conditioners: **1 mn** (2015)
- Combi boilers: **1 mn** (2014)
- Water heaters: **116 thousand** (2014)

- Large scale foreign groups have acquired or built partnerships with Turkish companies in the past:
 - Carrier** → **Alarko** (1998)
 - Buderus** → **Isisan** (2002. Later on, **Bosch** acquired Buderus in 2004.)
 - Vaillant** → **DemirDokum** (2007)
 - Daikin** → **Airfel** (2011)
 - BDR Thermea** → **Baymak** (2013)
- In 2013, **Viessmann** made greenfield investment in the city of Manisa to manufacture **100,000** condensing combi-boilers per year.



▶ Air-Conditioners

- As Turkey complies with the EU regulation which limits the sales of energy inefficient air conditioners, the air conditioner market has contracted in last years.

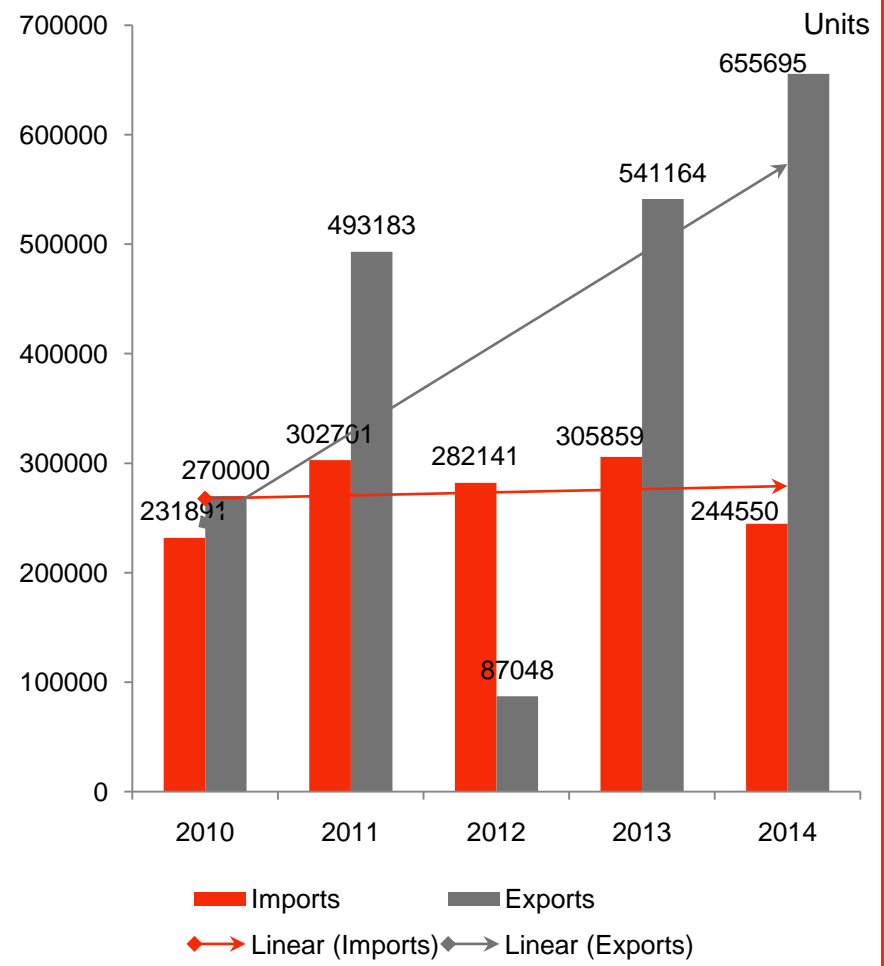
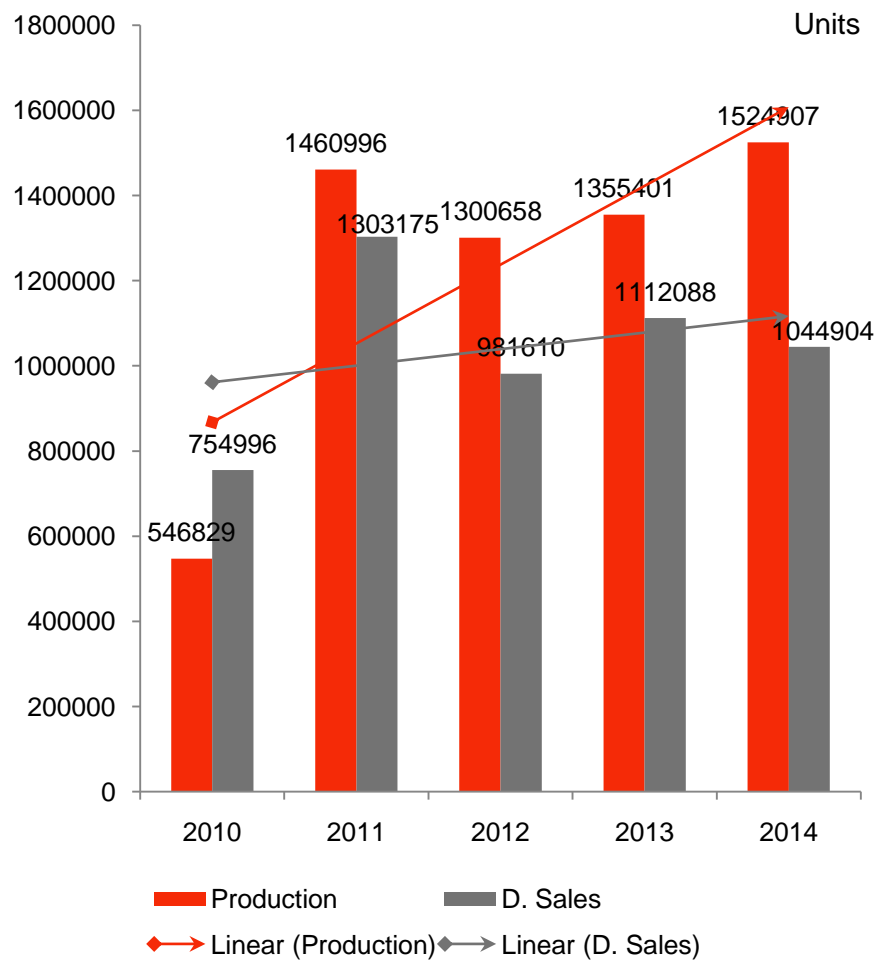


Source: Air-conditioning and Refrigeration Manufacturer's Association (ISKID), 2016



▶ Combi Boilers

- CAGR (2010-2014): **29%** in production, **8%** in d. sales, **1%** in imports, **25%** in exports.

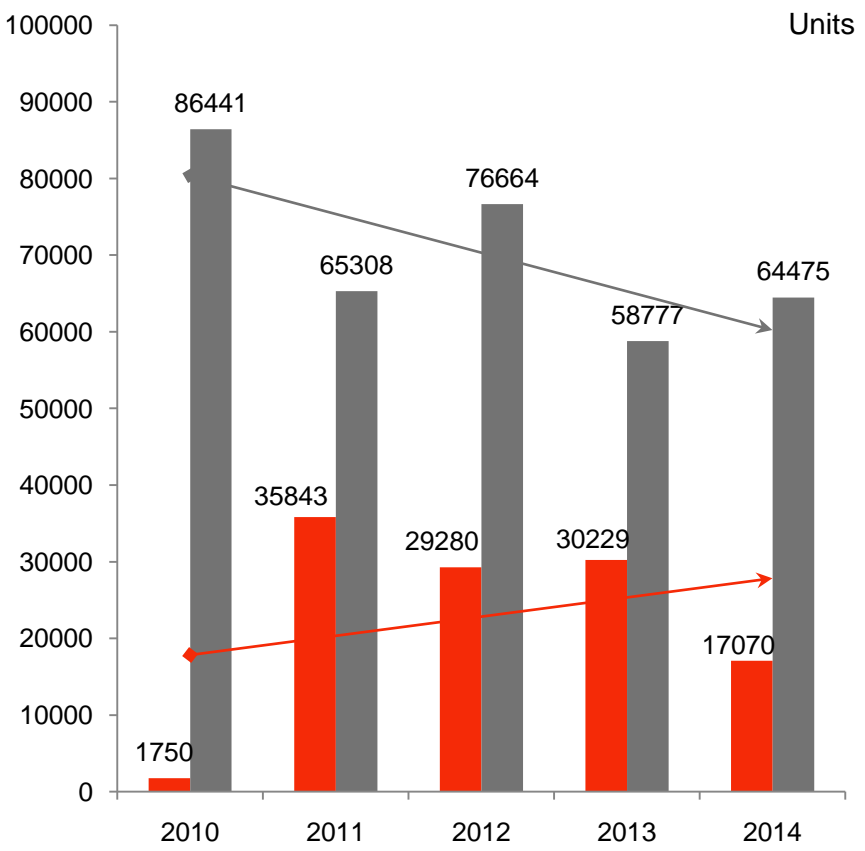
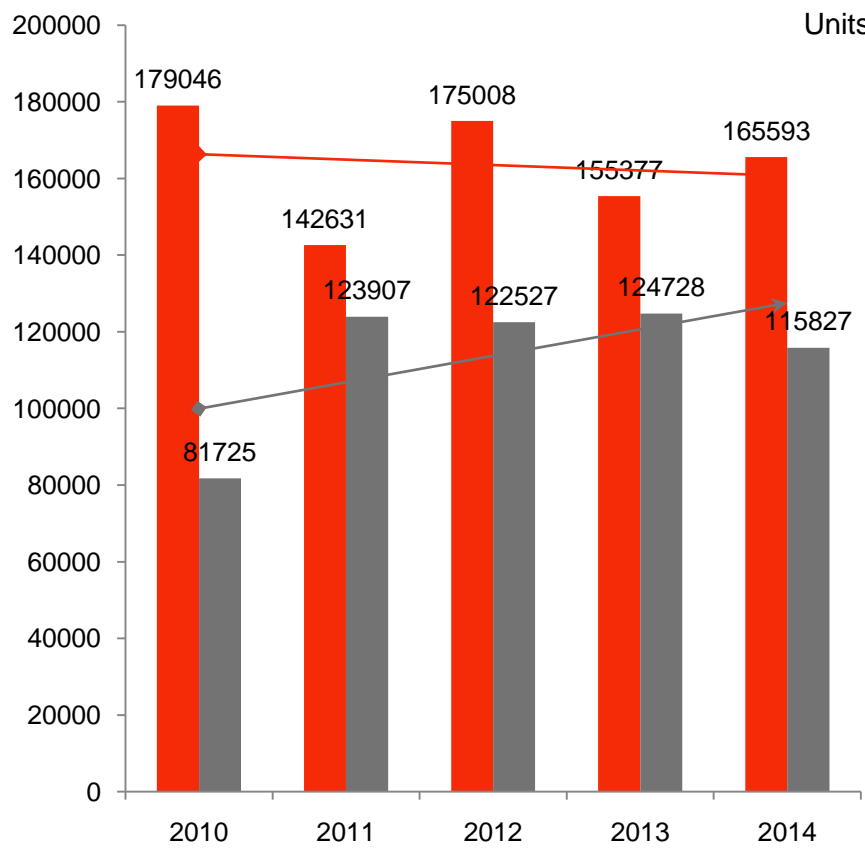


Source: The Union of Chambers and Commodity Exchanges of Turkey (TOBB), 2015



▶ Water Heaters

- CAGR (2010-2014): **-2%** in production, **9%** in d. sales, **77%** in imports, **-7%** in exports.



■ Production ■ D. Sales
◆ Linear (Production) ◆ Linear (D. Sales)

■ Imports ■ Exports
◆ Linear (Imports) ◆ Linear (Exports)

Source: The Union of Chambers and Commodity Exchanges of Turkey (TOBB), 2015



D. Main Companies

▶ Largest Manufacturers

Company	Business Field	Net Sales (TRY mn, 2015)*	Number of Employees
Arcelik	White Goods	14,166.1	26,128
Vestel Elektronik	Electronics	9,250.5	15,690
BSH Ev Aletleri	White Goods	4,661.4	6,624
Vestel Beyaz Esya	White Goods	2,524.1	6,445
Bosch Termoteknik	HVAC	1,146.3	529
Indesit Company Beyaz Esya	White Goods	1,018.6	1,059
Daikin Isitma ve Sogutma	HVAC	756.7	844
Demirdokum (Vaillant)	HVAC	671.0	1,213
Alarko Carrier	HVAC	438.6	611
Baymak Makina (BDR Thermea)	HVAC	369.1	646
Kumtel Dayanikli Tuketim Mallari	White Goods	356.5	1,495
Candy Hoover Euroasia	White Goods	353.0	560

*EUR 1 = TRY 3.021 in 2015

Source: Fortune Magazine (July 2016), Capital Magazine (Aug. 2016) and company web sites



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