

Arnold Dale
EKMAN & CO

**The European Residential
Wood Pellet Market**

Pellet Fuel Institute Conference
Orlando Florida
27 – 29 July 2014



Ekman is one of the world's leading sales and marketing organizations, focusing on the global forest industry.



Ekman at a glance



Pulp



Paper &
Packaging



Recovered
Materials



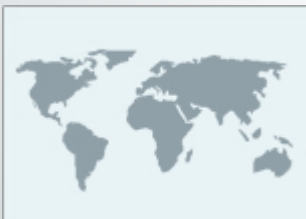
Bioenergy



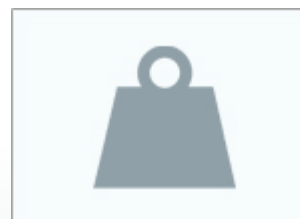
Incorporated in
1802



277 employees
40 locations



Represented in
100 + countries

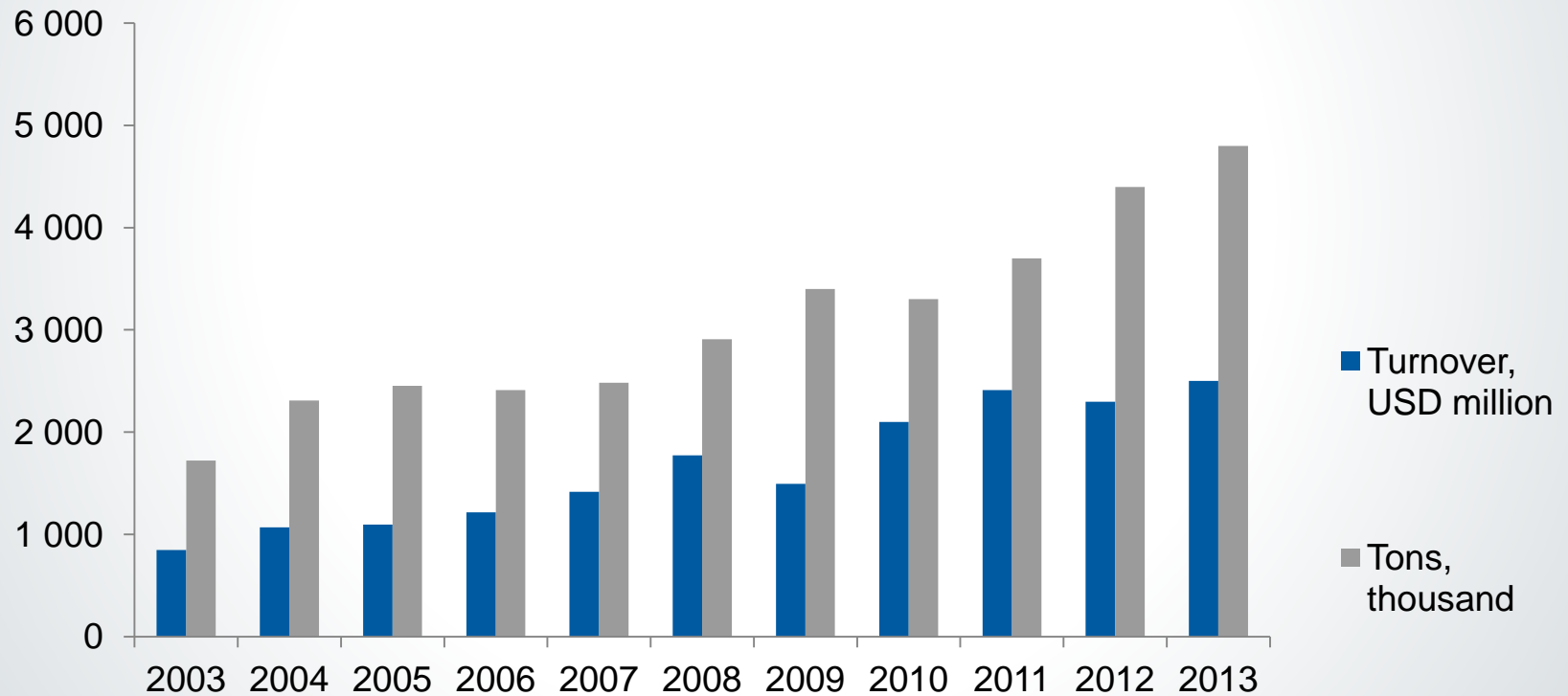


+ 4 800 000
tons/year

Our hubs – a truly global concept



Ekman Group Volume & Turnover 10 years



Bioenergy – at a glance

- 10 employees in Sweden, Denmark and Latvia
- Trading wood pellets and PKS since 2008
- Leading biomass trader in Europe
- Exclusive agents for 900,000 ton wood pellet plant in Vyborg, Russia
- Exclusive agents for the 120 000 ton Scotia Atlantic plant in Canada
- Overseas sales agents for the Okanagan Pellet Company in British Columbia Canada
- Delivering to the consumer market in Scandinavia & Italy



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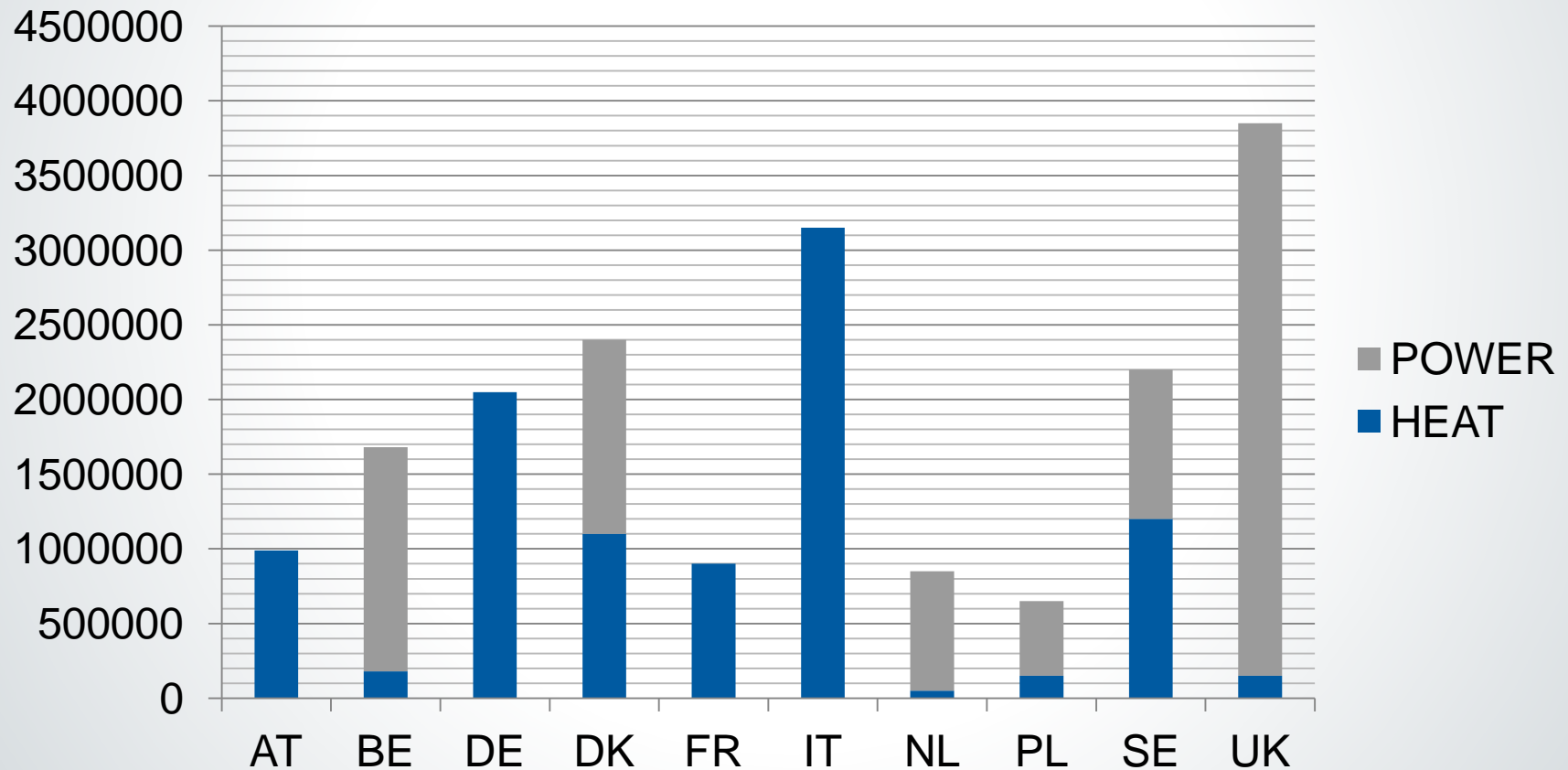
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Share of heat/power pellet consumption in the highest consuming EU countries (2013)

Source: EPC & Ekman & Co



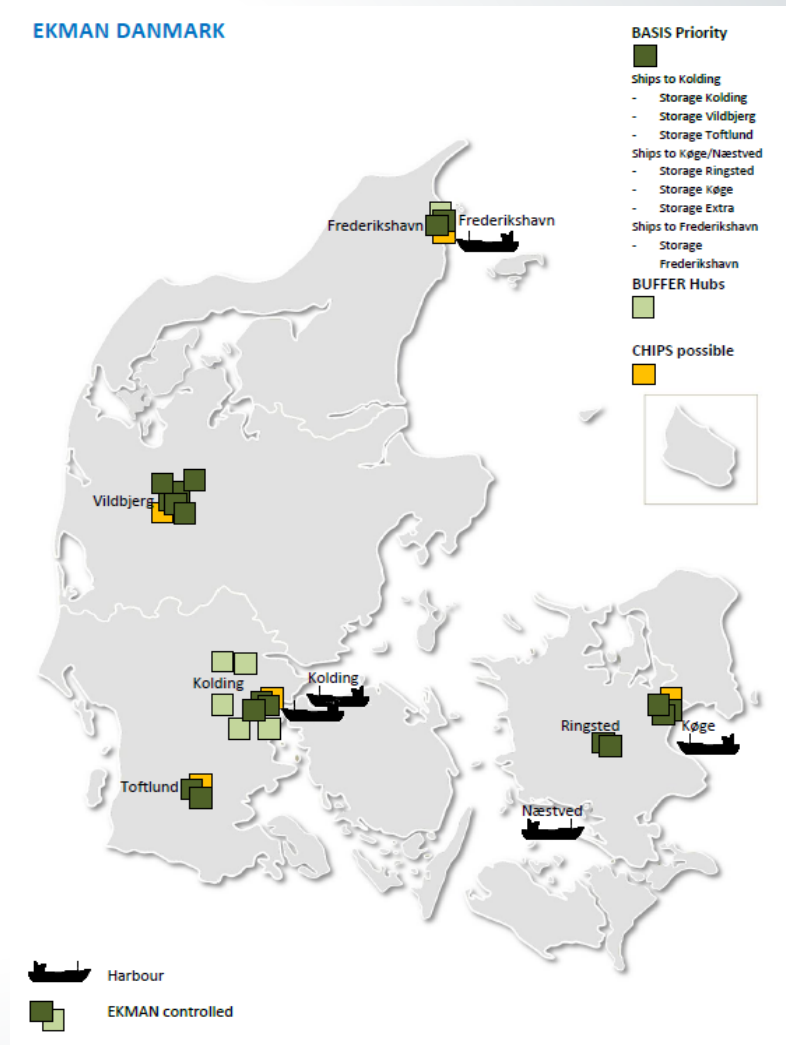
Wood pellet consumption in Denmark 2013

Woodpellet consumption in Denmark

| | |
|--------------------------|----------------------|
| Dong energy & Vattenfall | 1,300,000 ton |
| CHP/DH | 300,000 ton |
| Industry/Large Buildings | 100,000 ton |
| Farmers | 100,000 ton |
| Private | 600,000 ton |
| Total | 2,400,000 ton |

Danish pellet production 100,000 ton

Source: Ekman & Co estimate



Industrial vs. residential markets

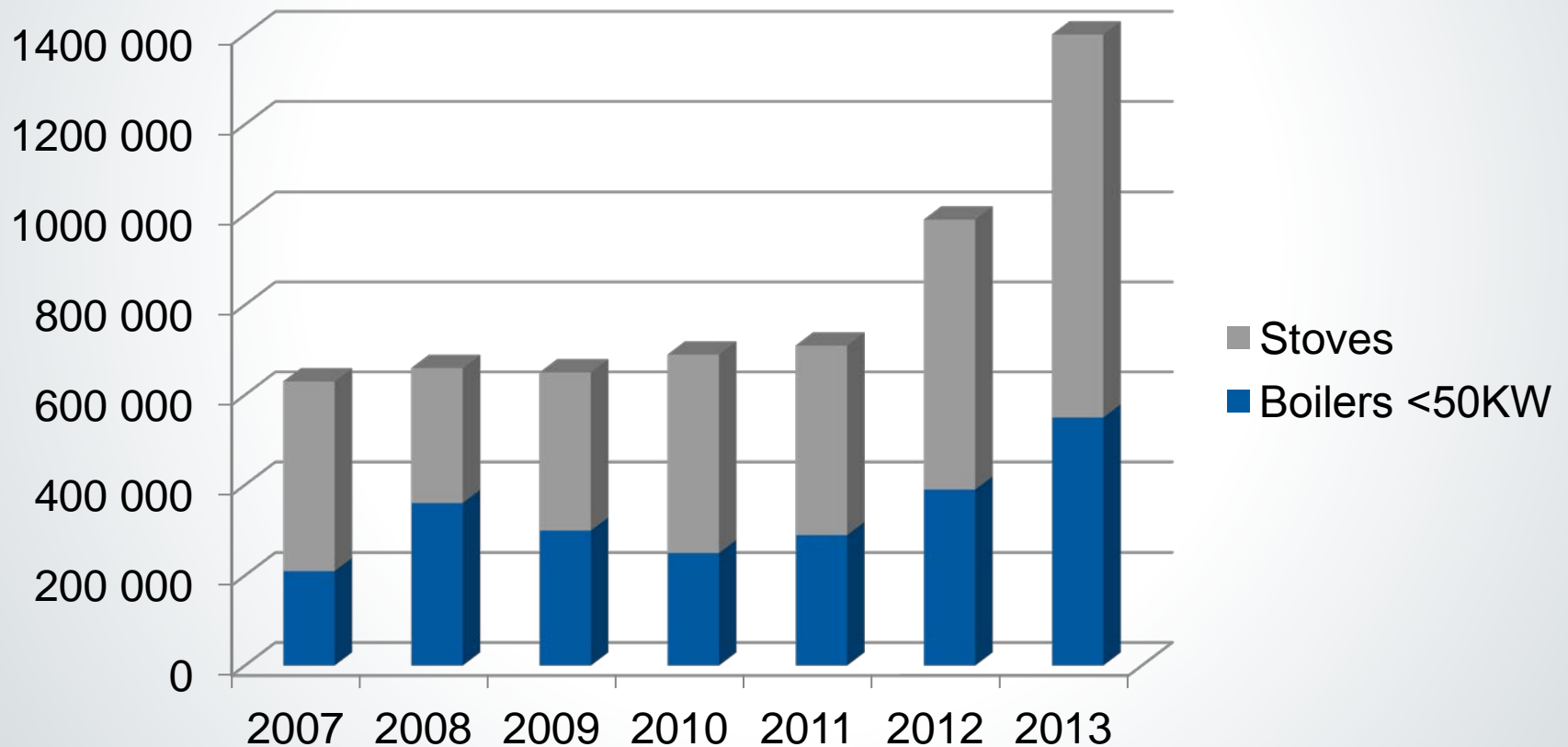
- Industrial wood pellets replace coal. Consumer pellets replace oil = different price drivers
 - Quality requirements are different, although strict for both segments
 - Logistics and handling for consumer market requires infrastructure
 - Buying patterns are different, as are contracts
- ...but...*



- With some adjustments, most pellet producers can make premium pellets
- Large shipments of consumer grade pellets from the USA to Europe expected
- Trading companies are starting to be active in both market segments

Residential wood pellet volumes by appliances

Source:EPC



The residential wood pellet market in Italy

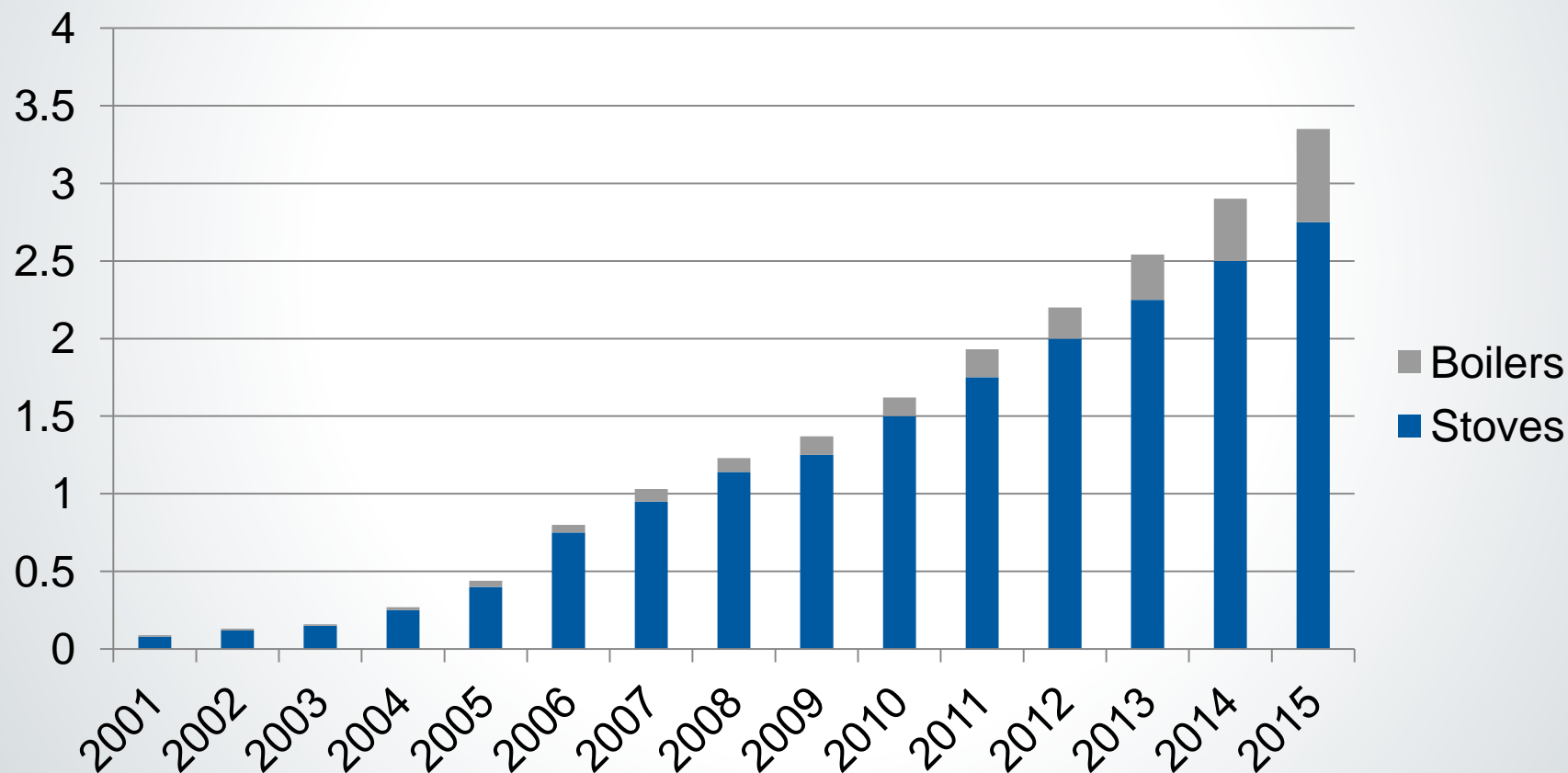
- The largest importer/distributor possibly distributes just under 200 000 mt per annum
- There are a few importers who take about 100 000 mt
- All other importers are small in size and they are also very demanding and time consuming
- Prices are lower in the north of Italy and higher in the south
- The vast majority of imported pellets are in 15 kg bags and arrive by road or container



Installed stoves and boilers Italy 2001-2013

(2014 & 2015 estimated)

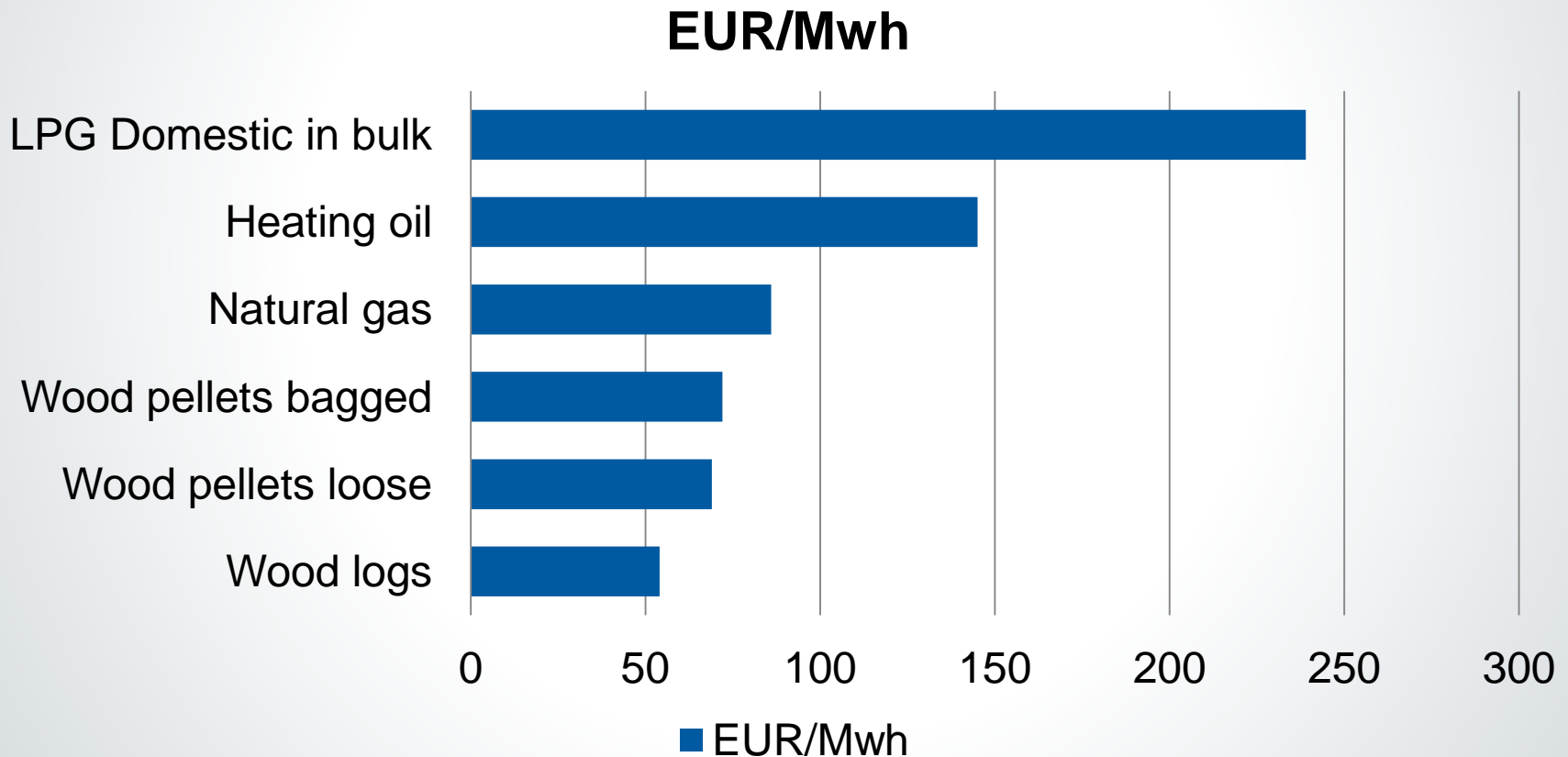
(Source AIEL)



Primary energy cost of pellets vs other heating fuels in Italy

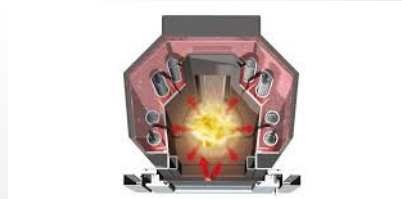
Including delivery and all taxes

(Source AIEL September 2013)



PALAZZETTI wood pellet stoves & boilers

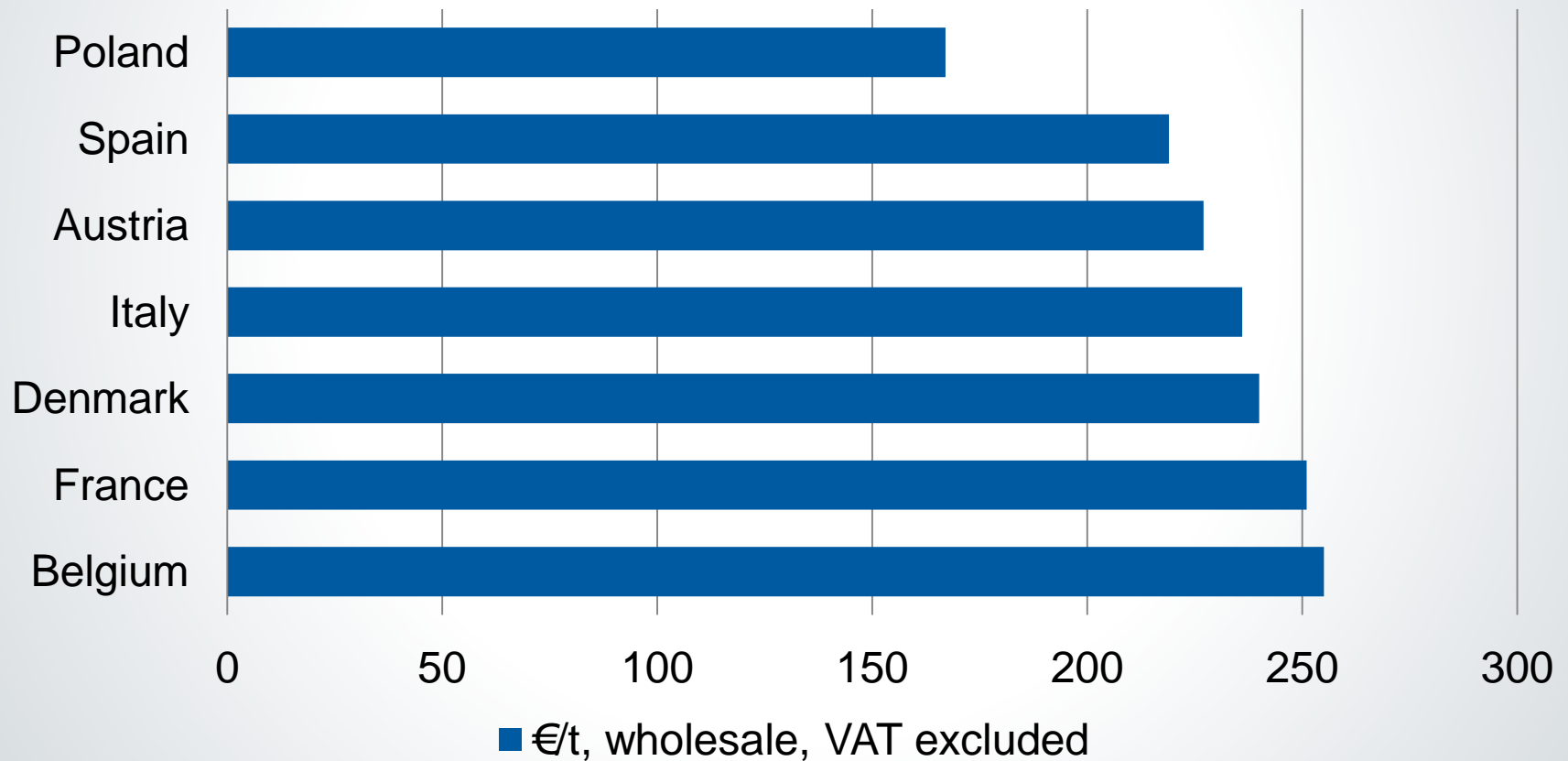
- Ekman Denmark are the exclusive distributors for Palazzetti wood pellet stoves and boilers in Denmark
- Distribution network for sales and trained installers



Pellet price comparison various EU countries

15 kg pellet bags

(Source EPC 2013)

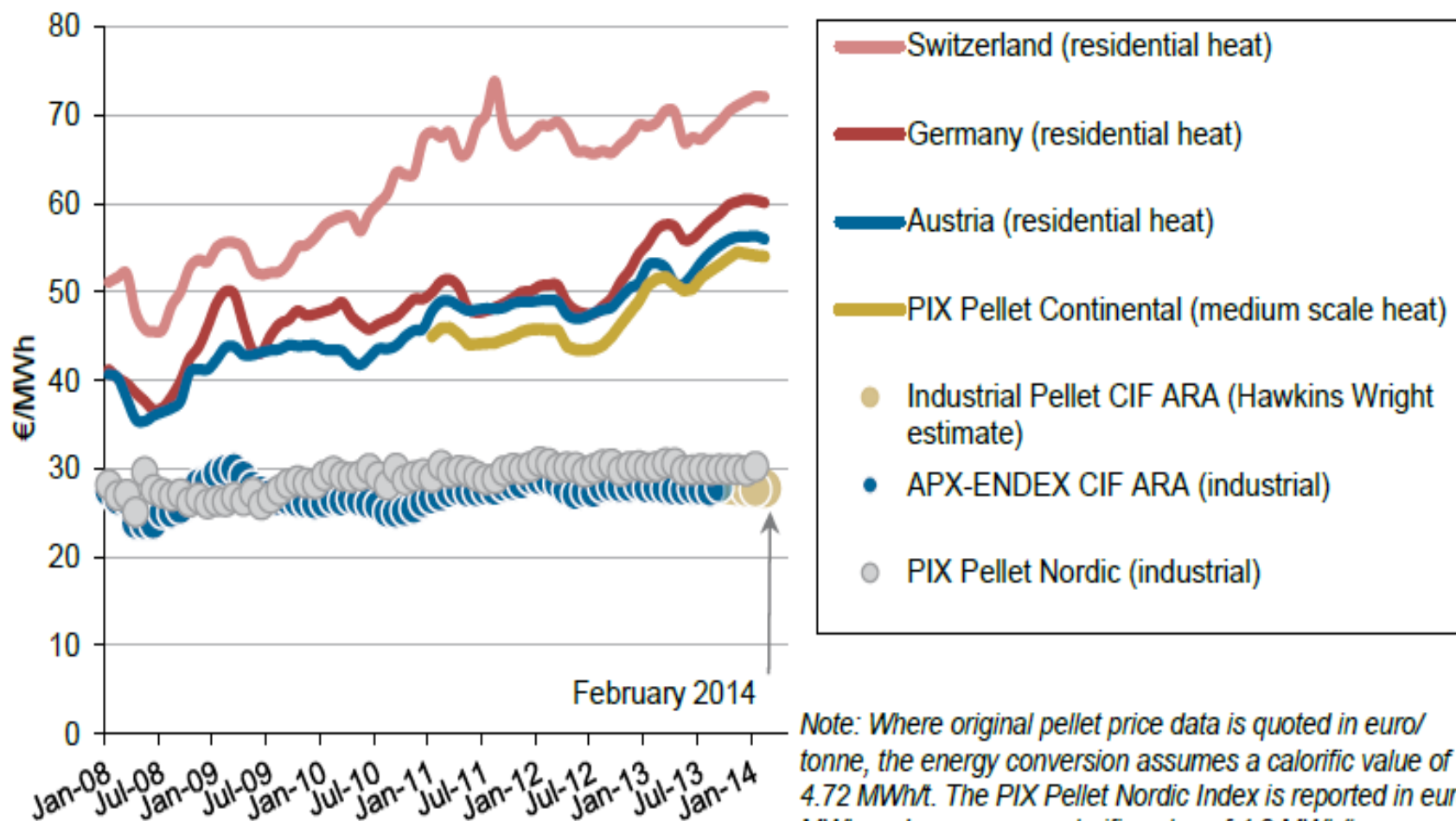


Imports of bulk wood pellets to Italy

- Italy is Europe's largest residential wood pellet market
- 90% of all pellets sold are for stoves and only 10% are for boilers
- Italy is very dependent on imports
- We believe that 600 000 t will be imported in bulk during 2014 and will be bagged locally
- Traditional suppliers are experiencing growth in their home markets and reducing export volumes
- Security of supply and price stability are two of the main challenges for the future
- The USA will become one of the major suppliers but fines are a very big concern for importers of bulk pellets



Prices of wood pellets in selected European countries – January 2008 to February 2014



Sources: DEPV (Germany), proPellets (Austria), Pellet Preis (Switzerland), APX-ENDEX and FOEX (PIX Pellet Nordic and Continental Indices). From October 2013, when APX-ENDEX stopped publishing prices, CIF ARA prices have been estimated by Hawkins Wright

The Swedish wood pellet market 2013

Source: Svebio

- The Swedish wood pellet market grew by 330 000 mt during 2013
- This is a sharp turnaround compared with 2012 when the market fell by about 560 000 tonnes.
- Production in Sweden increased by about ten percent or 140 000 tonnes in 2013
- Imports increased by about 45 percent or 222,000 tonnes and exports of Swedish pellets decreased by approximately 17 percent or 33,000 tons according to statistics from Statistics Sweden.
- Five new pellet plants commenced production
- Five pellets plants either closed down or were mothballed



Residential market for Ekman & Co in Denmark

- Importing 165,000 tons in 2013 from Europe and North America
- Sales in 2014 minimum 250,000 tons
- Vessels range between 2,500 to 31,000 tons
- Expertise in sampling, quality management and logistics
- Possibility to store, bag and brand pellets
- Sales to heat plants requiring almost premium, commercial buildings and retailers
- Customer list of more than 290 names
- Forward integration in Denmark



EN Plus A1 Certification will help increase your export sales



- Pellets must have a consistent durability
- There is a long checklist (including pellet analysis)
- If the plant is properly managed and equipped it will be certified
- Adequate plant technology and proper internal quality control are critical
- Certification managed by the European Pellet Council
- Based on EN 14961-2
- A handbook describes the requirements for certification
- Distributors are also certified (simplified procedure)



The European Residential Wood Pellet Market

Conclusions

- With some adjustments, most pellet producers can make premium pellets
- The European residential wood pellet market is growing at more than 1.4 million tons per year
- Many European countries cannot meet demand due to lack of available raw material
- The only option is to start importing wood pellets
- Certified wood pellets will always be more desirable than non certified
- Producers should co-operate and seek ways to enter the export market
- Ekman can help smooth the way for exporters
- EN Plus is the only recognized European certification system for wood pellets and is accepted throughout Europe





Ekman

ONE OF THE WORLD'S LEADING SALES AND MARKETING
ORGANIZATIONS FOCUSING ON THE GLOBAL FOREST INDUSTRY.