



Development of the Composites Markets in Europe and in the DACH region

- Dr. Elmar Witten -

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AVK – The Network

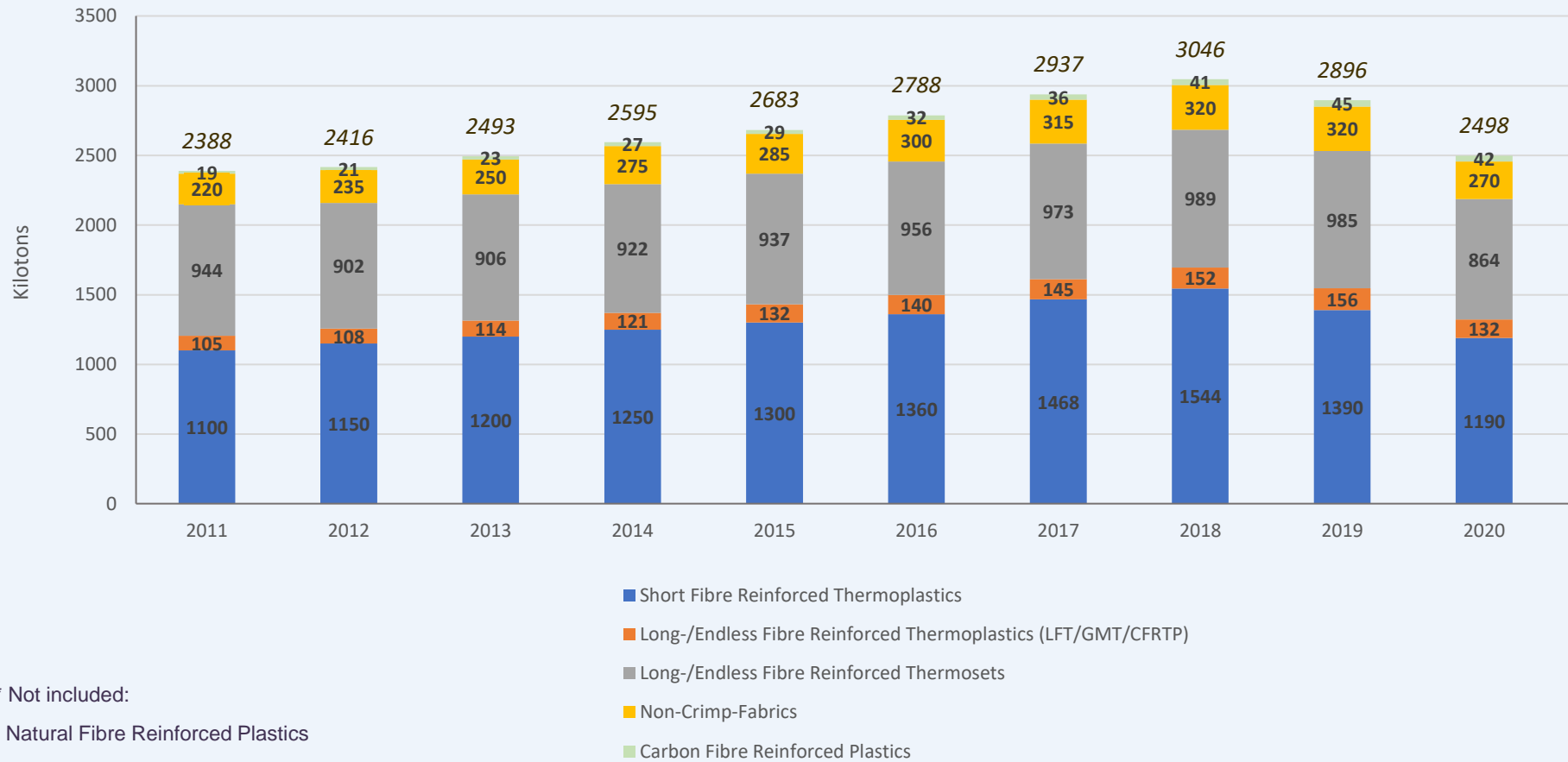


The Worldwide Composites Market - Facts

- **Worldwide Composites Market 2021: 12,1 million tons**
 - Increase compared to 2020 (11,2 million tons): 8%
 - Increase Europe compared to 2020: 18,3 %
- **Different regional development: Americas, Asia & Europe**
 - Market share Asia \approx 50%; Americas & Europe \approx each $\frac{1}{4}$ of world market
- **95% of the Reinforcements are Glass Fibres**
- **Carbon Fibre Reinforced Plastics: Market share of 1-2%**
- **Shortfibre Reinforced Thermoplastics are the biggest market segment**
- **Thermosets are still the biggest group in the field of Long- and Endlessfibre systems**

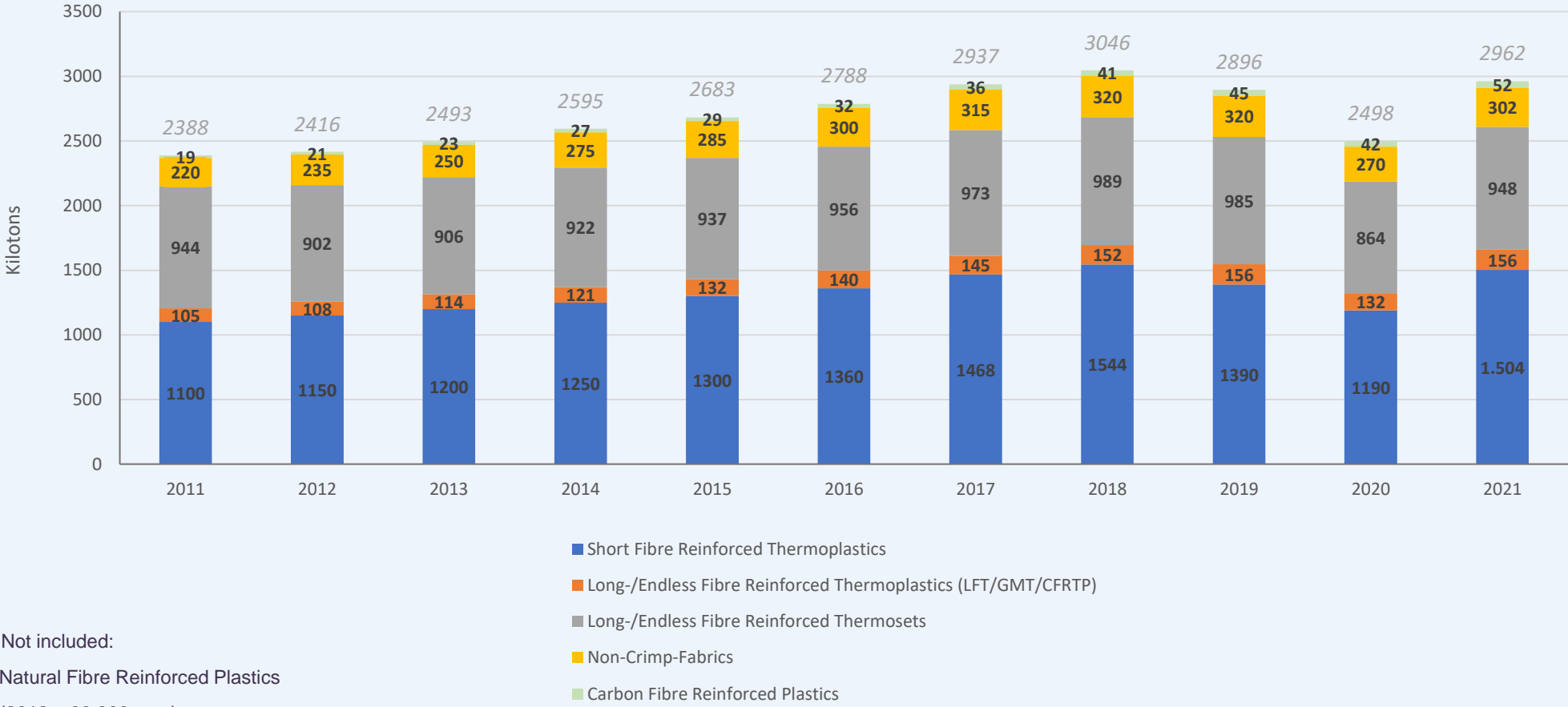
The European Composites Markets

The European Composites* Market (2020)



* Not included:
Natural Fibre Reinforced Plastics
(2012 = 90.000 tons)

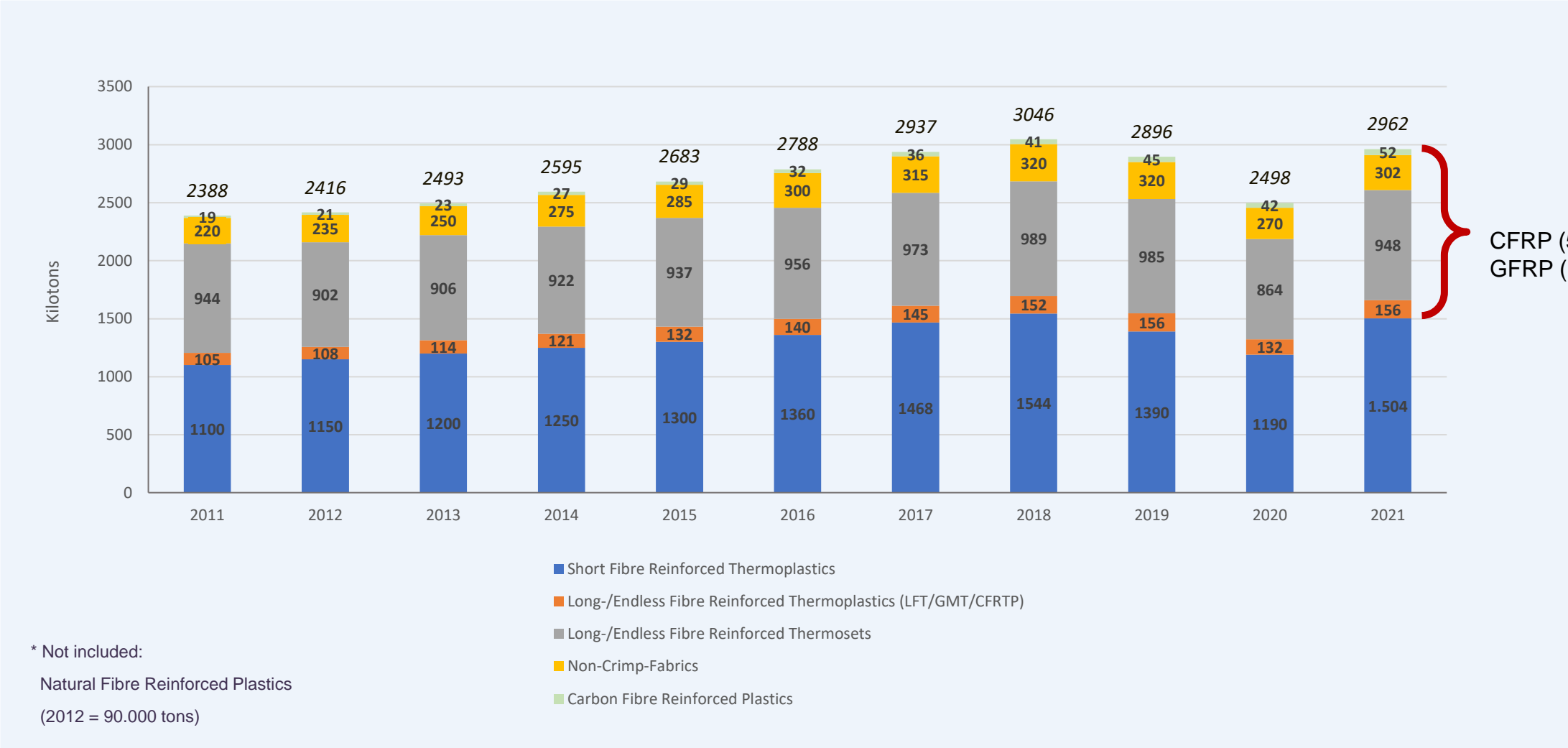
The European Composites* Market (2021)



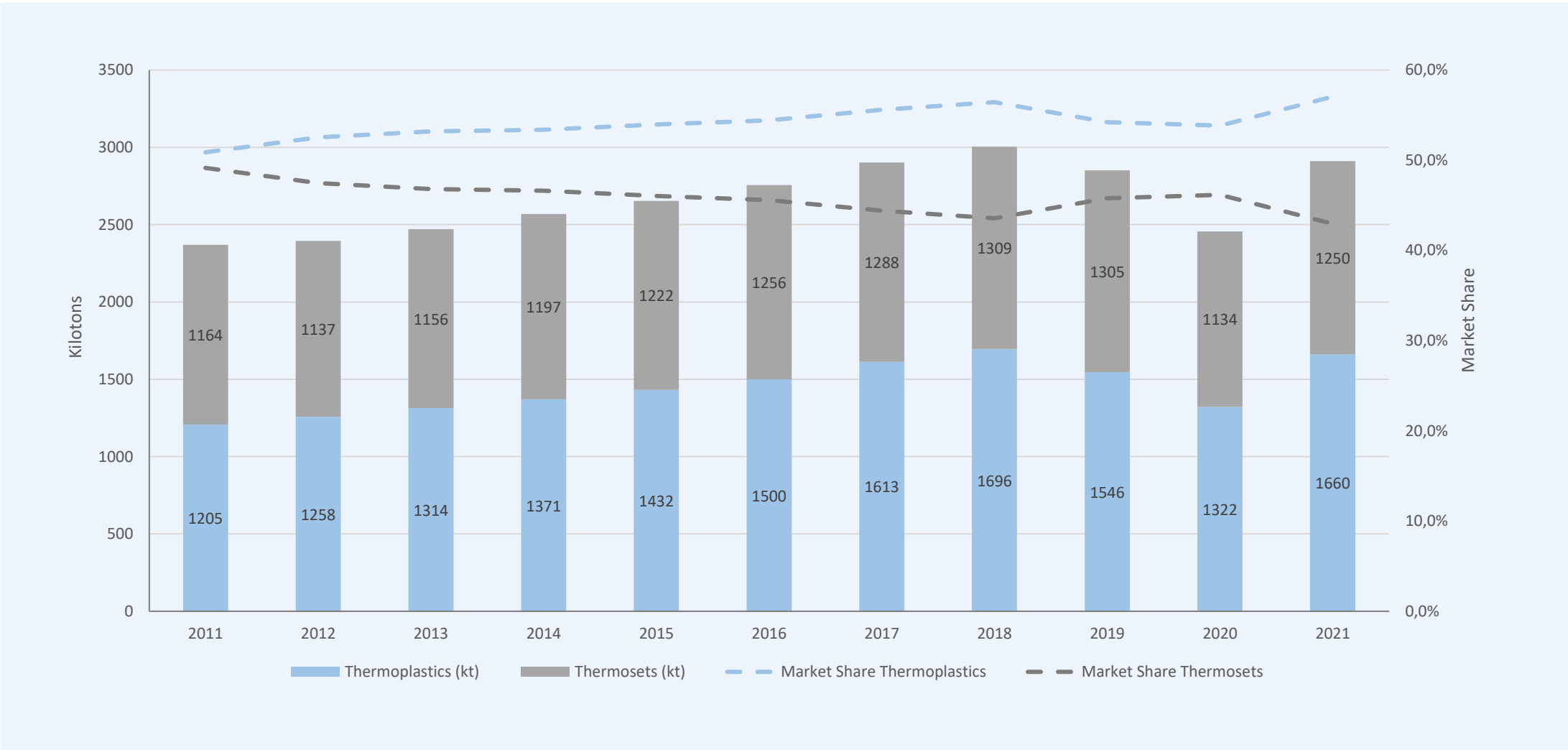
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The European Composites* Market (2021)

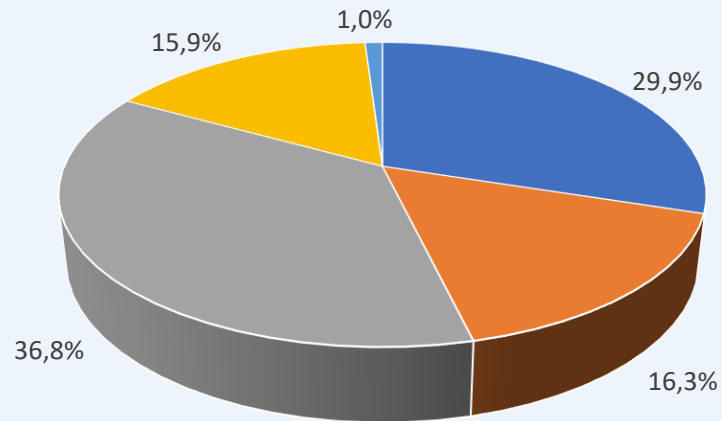


Glass Fibre Reinforcements – Main Material Systems



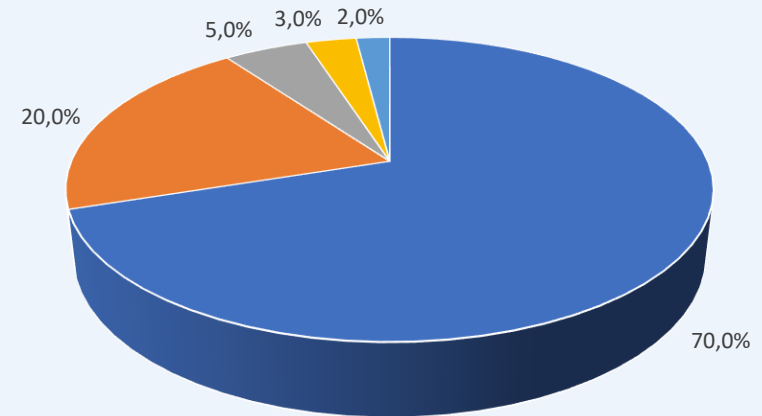
European Composites* Market - Applications

Applications Thermoset



■ Transport ■ Electro / Electronic ■ Construction ■ Sports & Leisure ■ Others

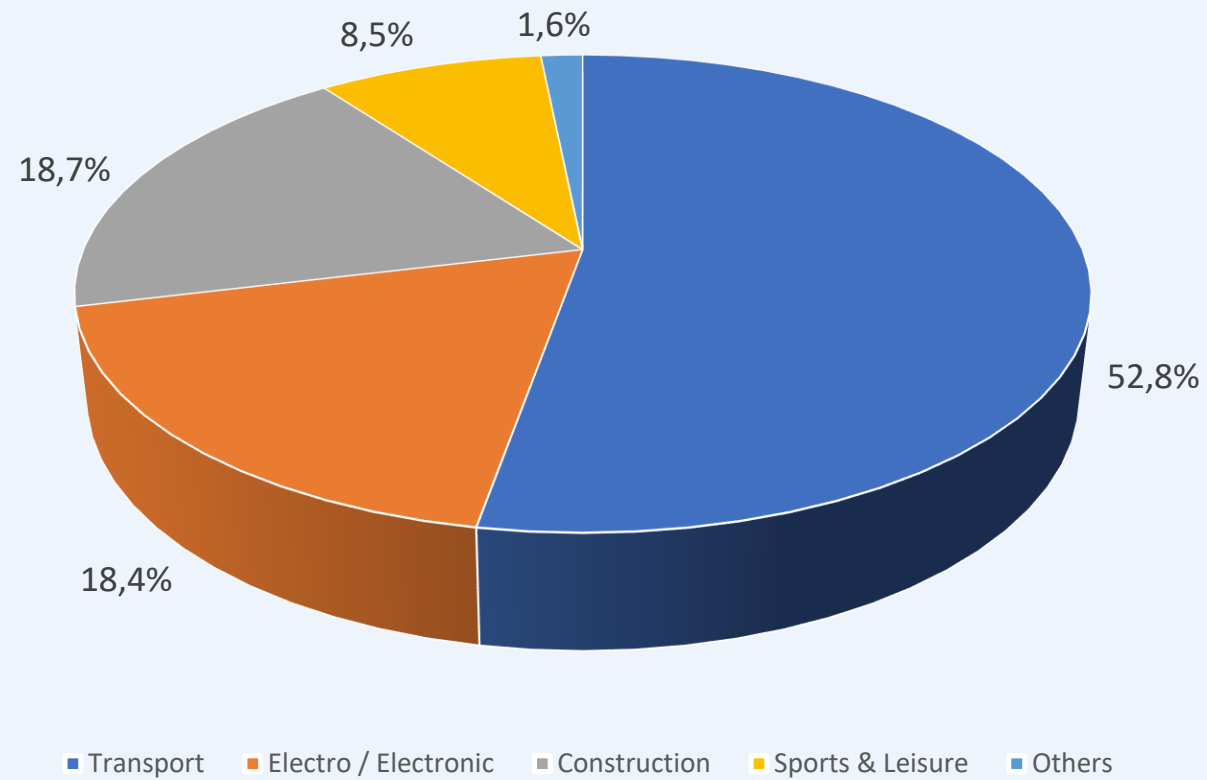
Applications Thermoplastics



■ Transport ■ Electro / Electronic ■ Construction ■ Sports & Leisure ■ Others

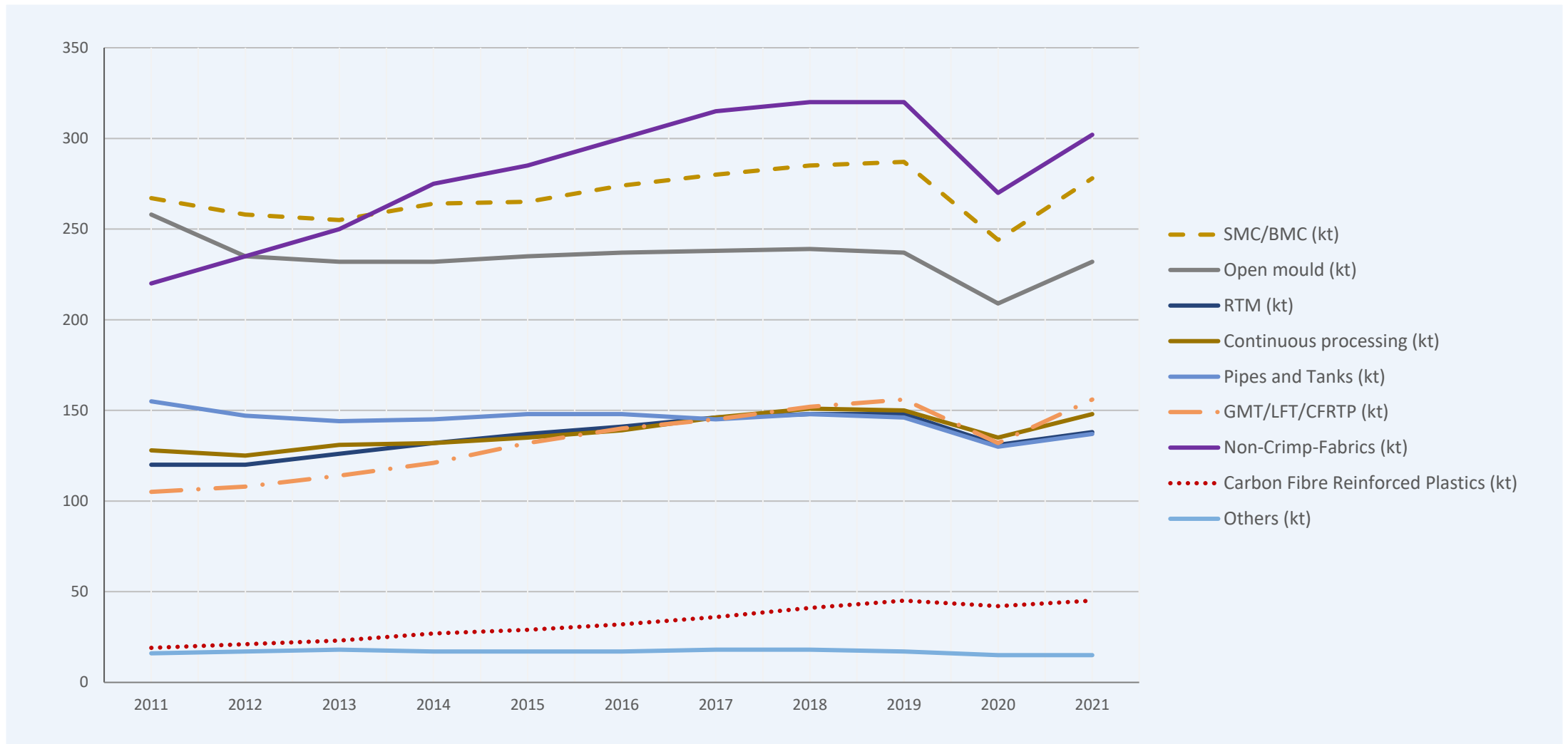
*without CFRP

European Composites* Market - Applications

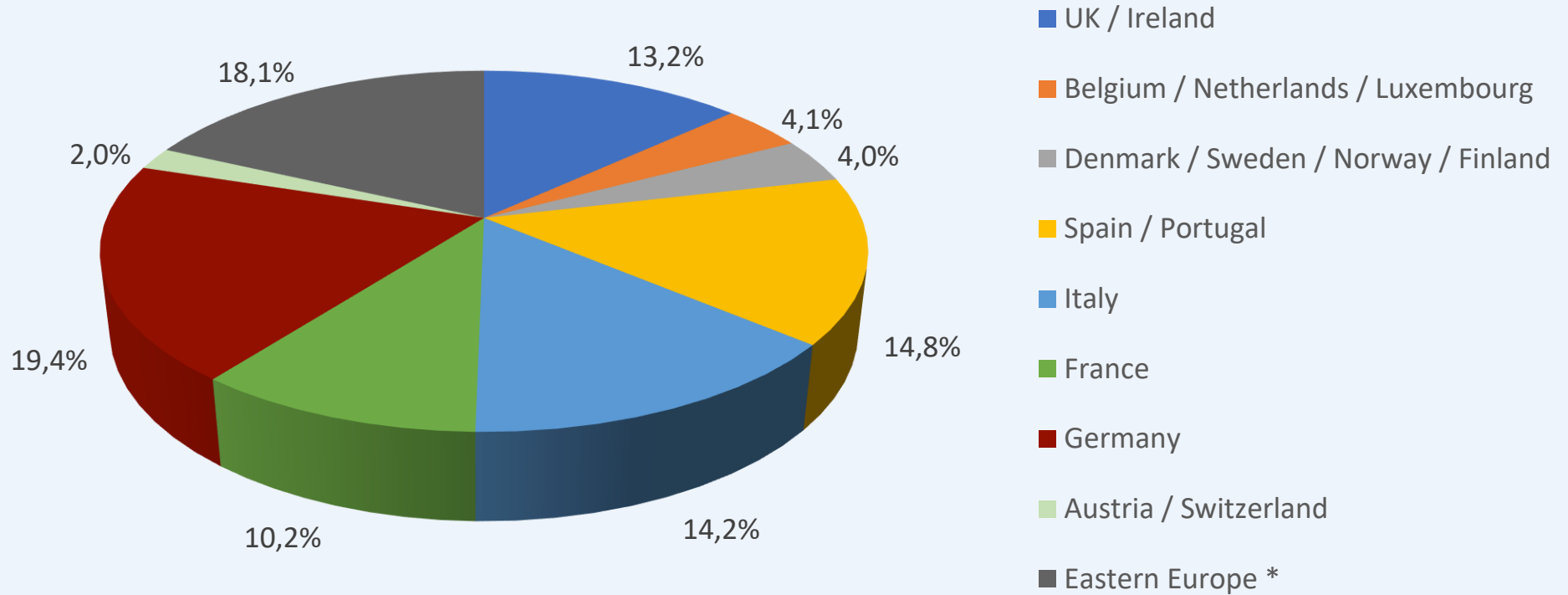


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European GFRP & CFRP Market Development (kt)



European GFRP & CFRP Market Development (kt)

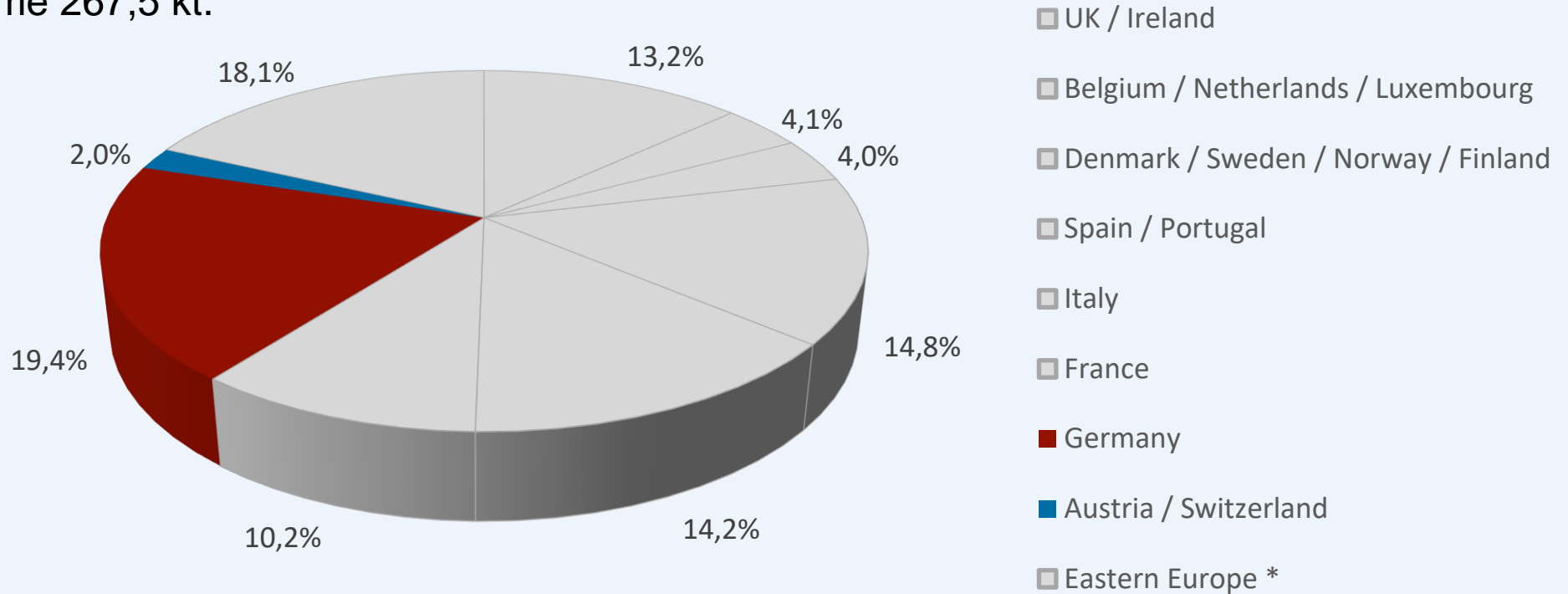


*Poland, Czechia, Hungary, Romania, Serbia, Croatia, Macedonia, Latvia, Lithuania, Slovakia and Slovenia

The Composites Markets in the DACH region

European GFRP & CFRP Market Development (kt)

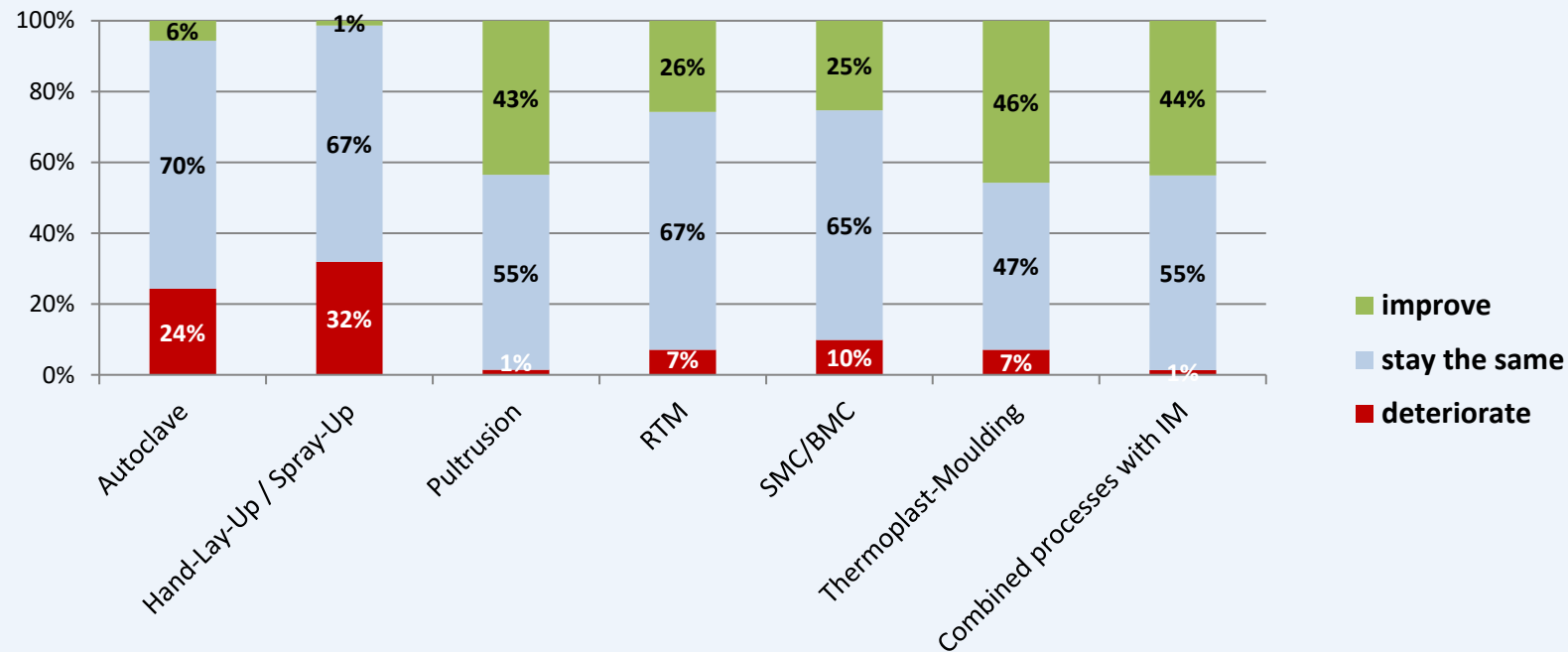
- Market Share 21,4 %
- Volume 267,5 kt.



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Developments in the DACH region

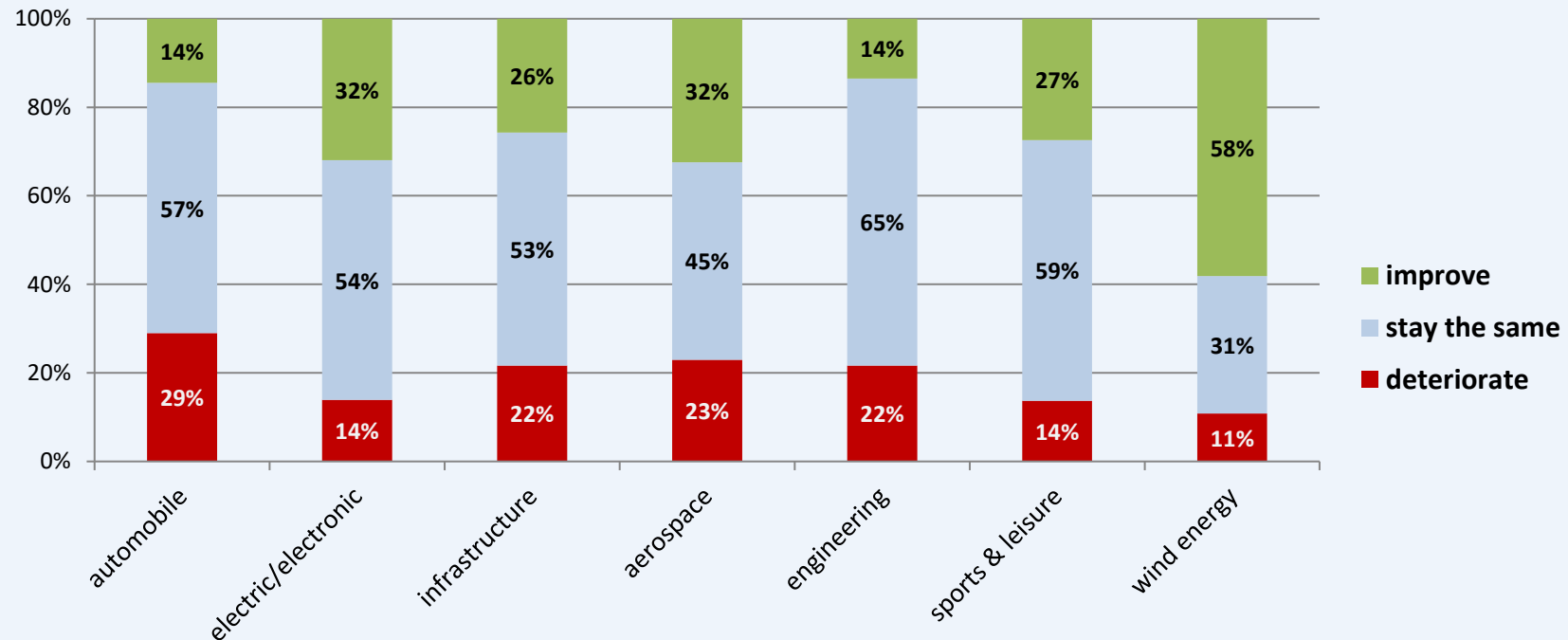
- In July 2022 the respondents of the Composites Germany Market Survey believed that that the specified application processes will develop as follows over the next six months:



Source: Composites Germany - Composites Market Survey 1/2022 - 100% missing data resulting from rounding inaccuracies

Developments in the DACH region

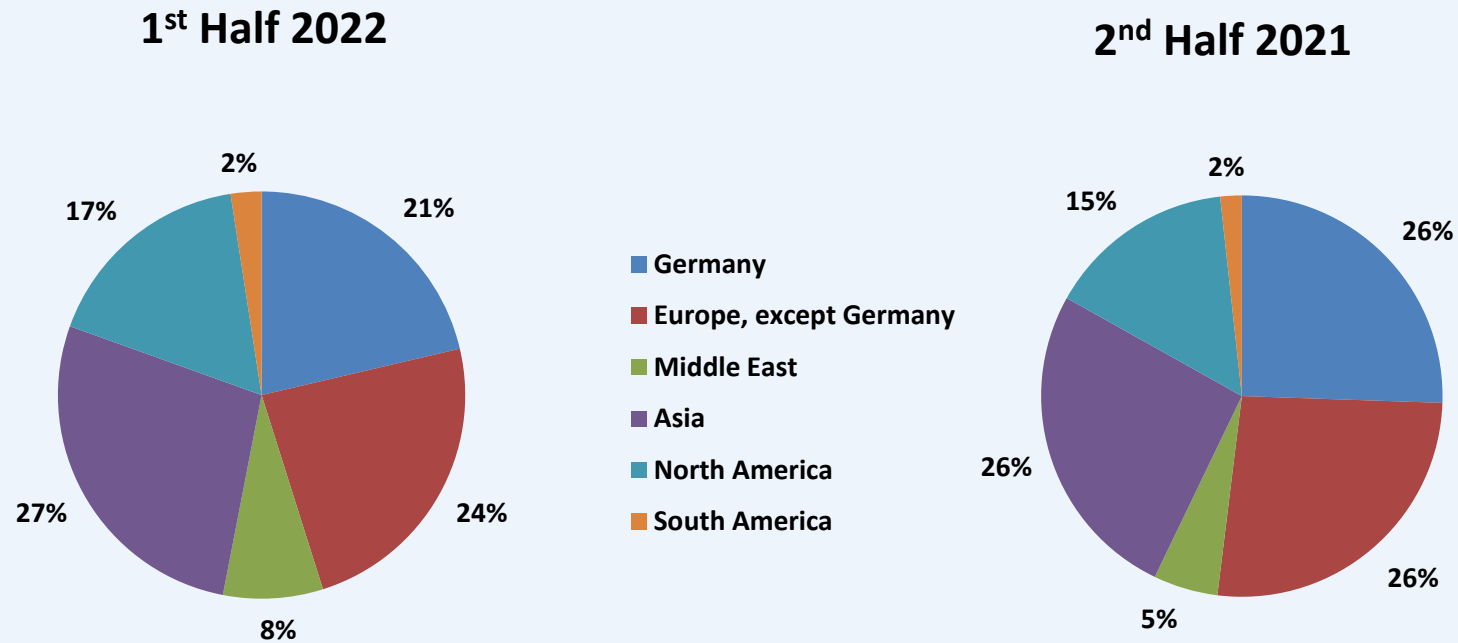
- In July 2022 the respondents of the Composites Germany Market Survey believed that the composites application industries will develop very differently over the next six months:



Source: Composites Germany - Composites Market Survey 1/2022 - 100% missing data resulting from rounding inaccuracies

Growth stimuli – regions

- The most important growth stimuli in the Composites segment are expected to come mostly from Germany, Europe and Asia:



100% missing data resulting from rounding inaccuracies

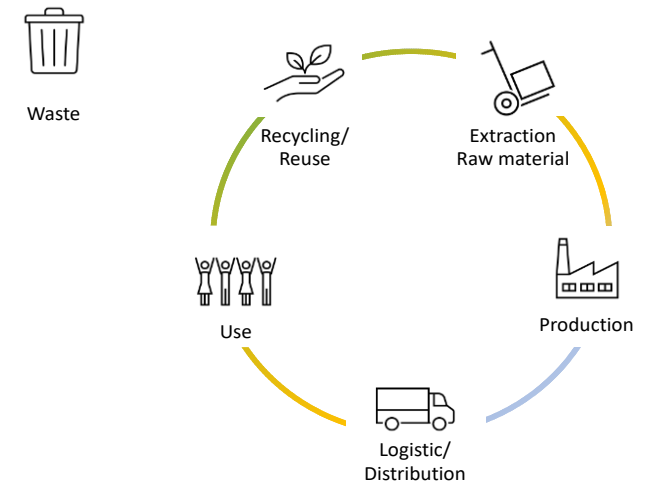
Challenges & Opportunities

Challenges & Opportunities

➤ Challenges - for the economy in general and for the composites industry, e. g.:

➤ Sustainability / Recycling

- Sustainability as core topic becoming important growth driver
- „Overemphasis“ on Recycling vs. LCA
- Recyclability vs. Recycling
- Unclear Definition of „Circular Economy“ for Composites
- Different regulations, laws and possibilities
- Missing waste codes
- Ecology and economy only work together
- ...



Challenges & Opportunities

- **Challenges - for the economy in general and for the composites industry, e. g.:**
 - **Raw material supply e. g.:**
 - Rising energy prices
 - Rise in raw material prices/lack of availability
 - Disruption of supply chains/logistics costs/additional effects ("ever given")
 - **Market environment e. g.:**
 - Structural change in mobility (chances & challenges)
 - Renewable energies – wind industry
 - Corona pandemic (positive & negative)
 - Increasingly uncertain political international environment
 - Additional effects: e. g. Semiconductor shortage



Challenges & Opportunities

- **Composites on a good way to the future**
 - High potential esp. for construction & mobility applications
 - Redesign-Thinking in mobility offers a lot of chances
 - Digitalization (e.g., autonomous driving, smart cities; IoT, ...) opens numerous possibilities
 - Material advantages (beneath lightweight potential) become better known
 - LCA-Advantages in several Applications
 - R&D on recycling is massively promoted by industry and politics
 - EuCIA LCA-Tool
 - **AVK Recycling Study**
 - Working groups @AVK
 - Several standardization activities (AVK, EPTA/EuCIA, ...)
 - Raw material prices beginning to drop
 - ...



Thanks a lot for your attention!

- let's stay in contact -

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