UNION EUROPÉENNE DES PRODUCTEURS DE GRANULATS
EUROPÄISCHER GESTEINSVERBAND
EUROPEAN AGGREGATES ASSOCIATION

UEPG

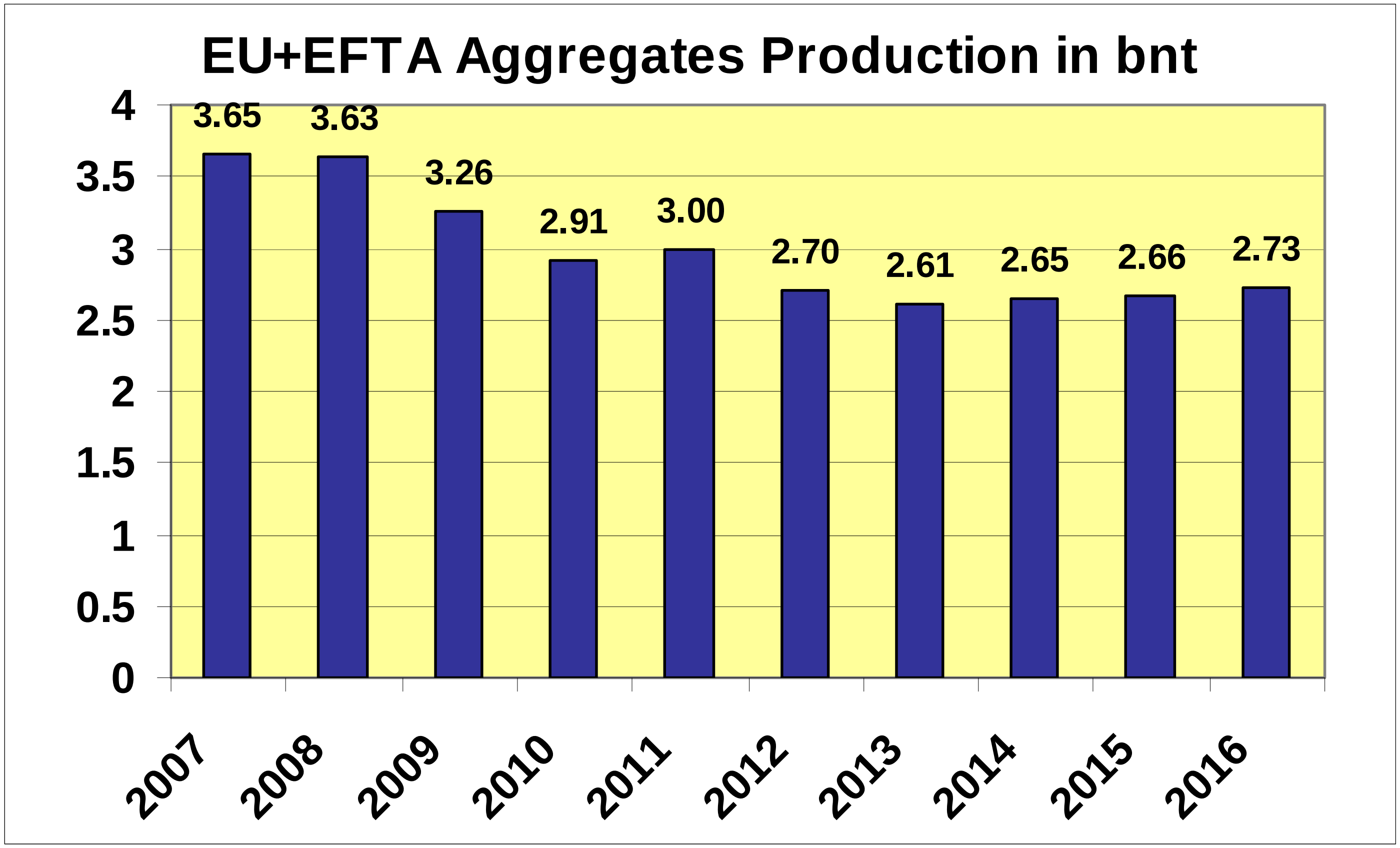
The European Aggregates Association

Analysis of the 2016 Economic SDIs, For Publication on the UEPG Website

Jim O'Brien, Honorary President

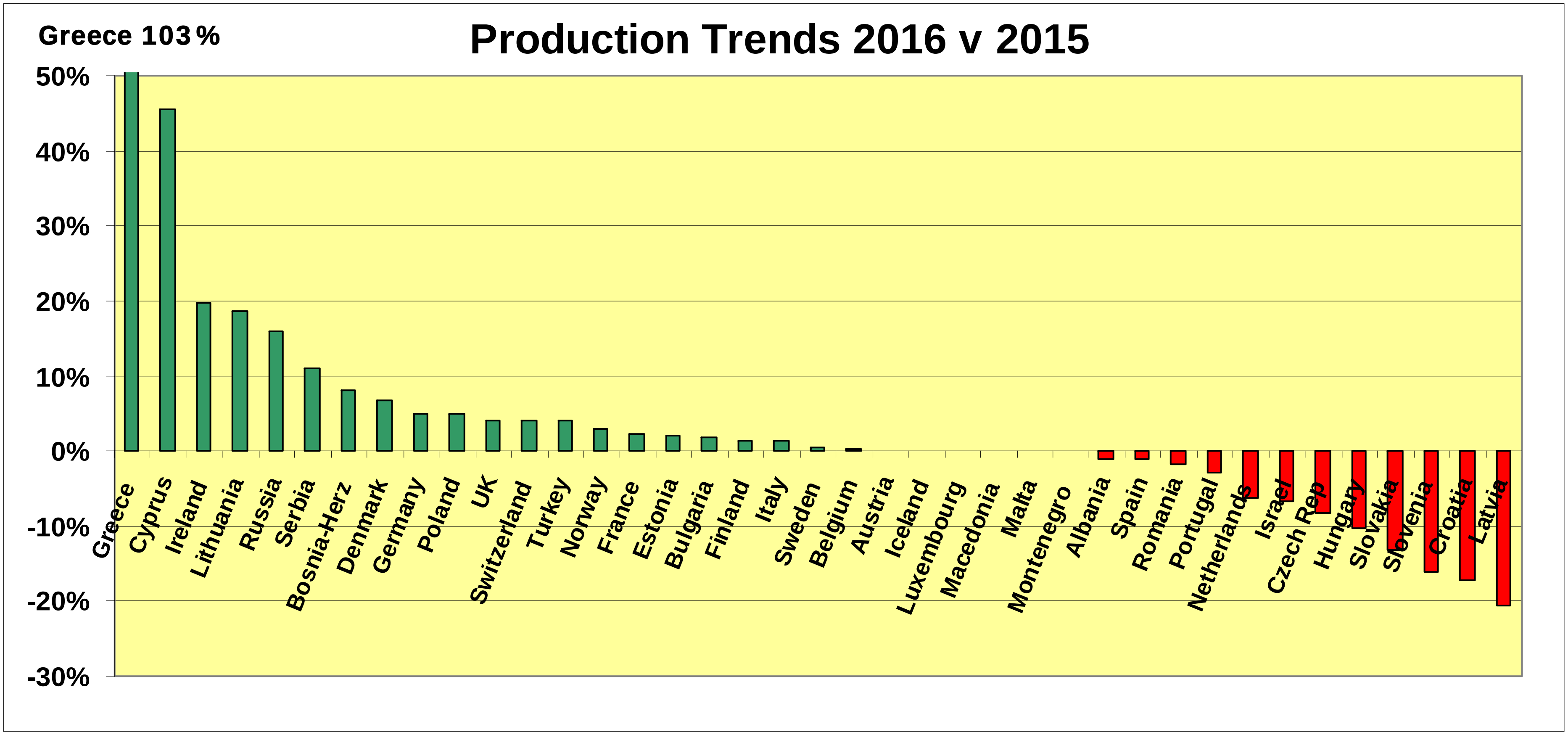
December 14, 2017

The Good News!



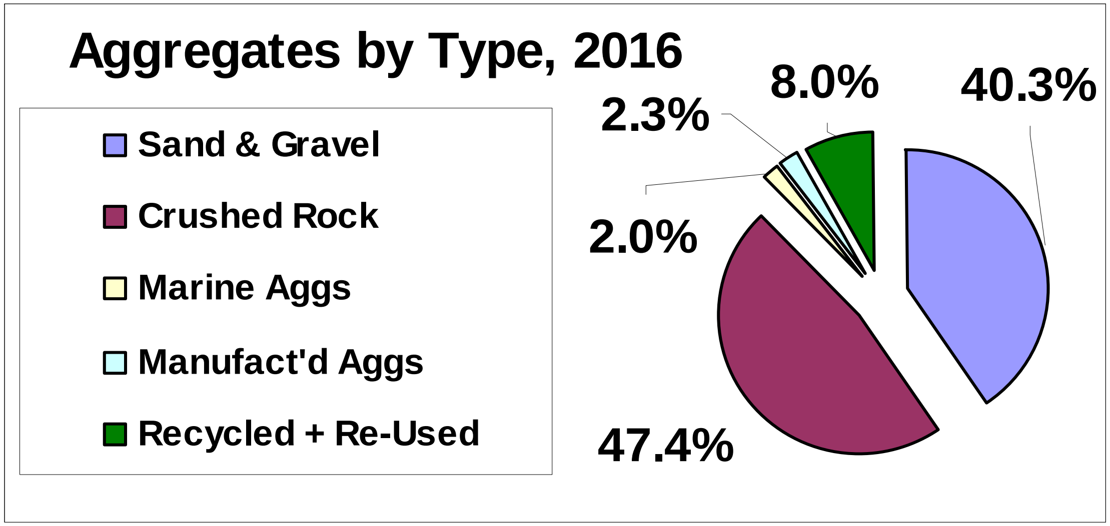
- EU+EFTA production for <u>2016 was 2.73bnt</u> versus 2.66bnt in 2015
- This indicates an <u>increase of 2.6% in 2016</u> compared to 2015
- Continues the very modest growth trend since 2013....

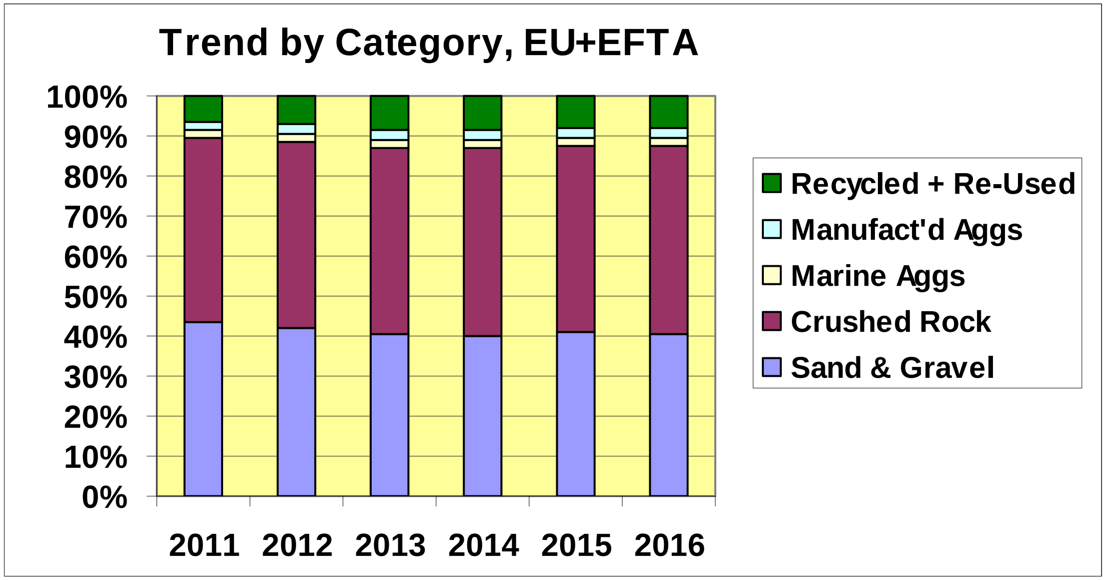
Production Trends 2016 v 2015



- The majority of countries saw welcome growth in 2016 versus 2015
- Greece grew by 103%, Cyprus by 45%, Ireland by 20%
- The weaker regions continued to be Iberia and Eastern Europe

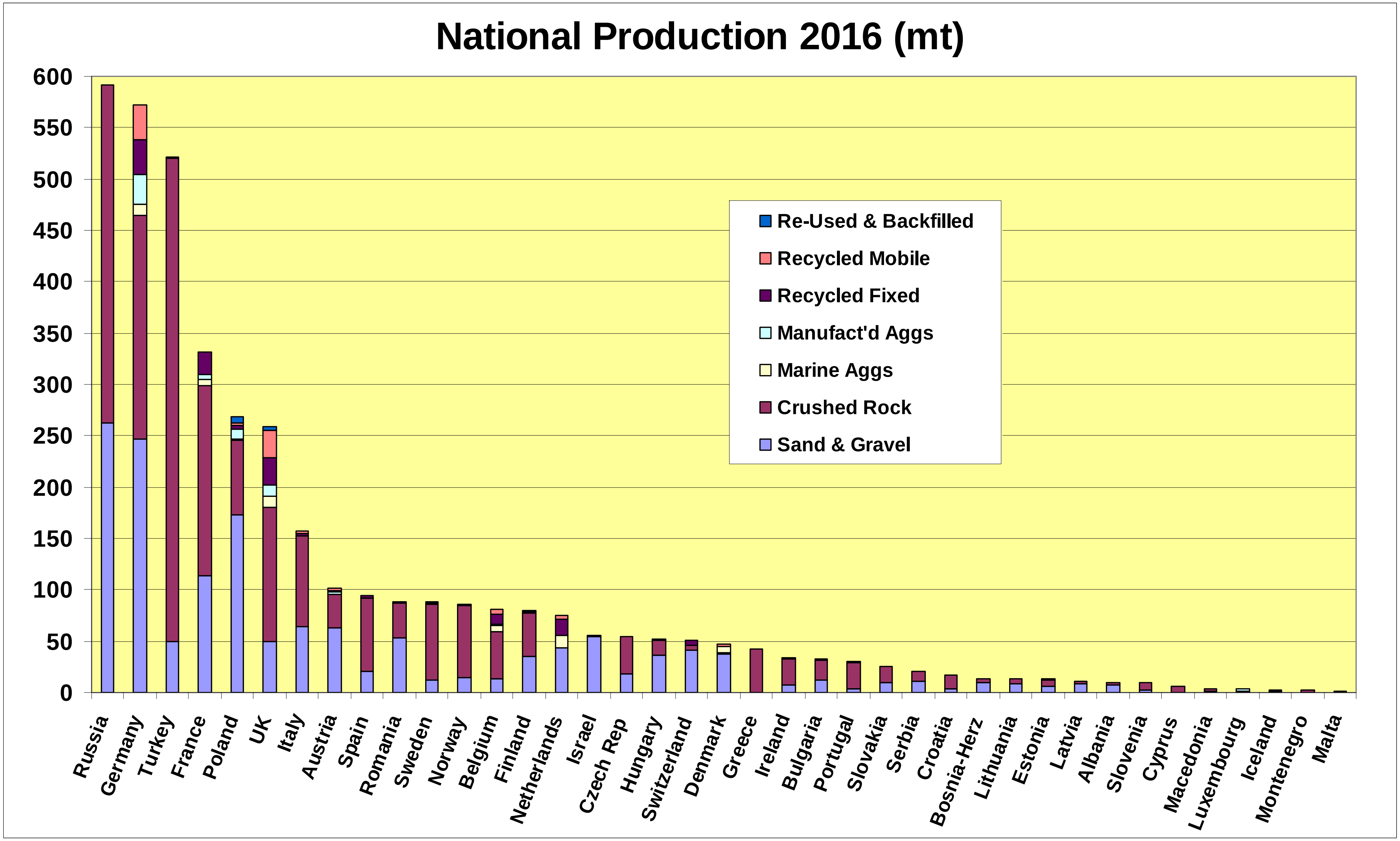
Types of Aggregates & Trends





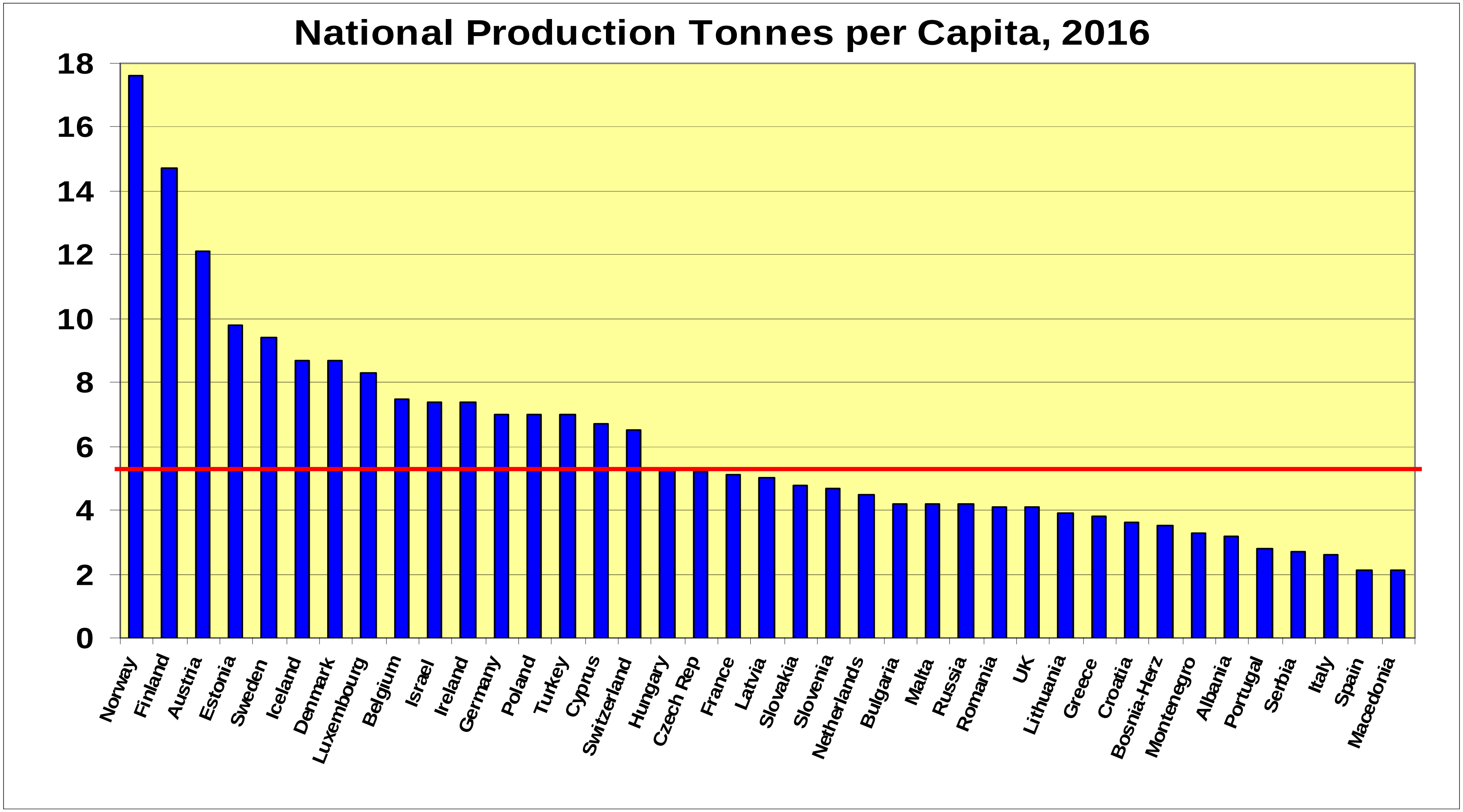
- 2016 saw a further slight decline in S&G to 40.3%
- Crushed Stone increased slightly to 47.4%
- Manufactured Aggregates declined slightly to 2.3%
- Marine Aggregates remained at 2%
- Recycled & Re-used (Backfill) Aggregates remained at 8%
- Total of secondary aggregates (recycled + manufactured) = 10.3%

National Production Breakdown



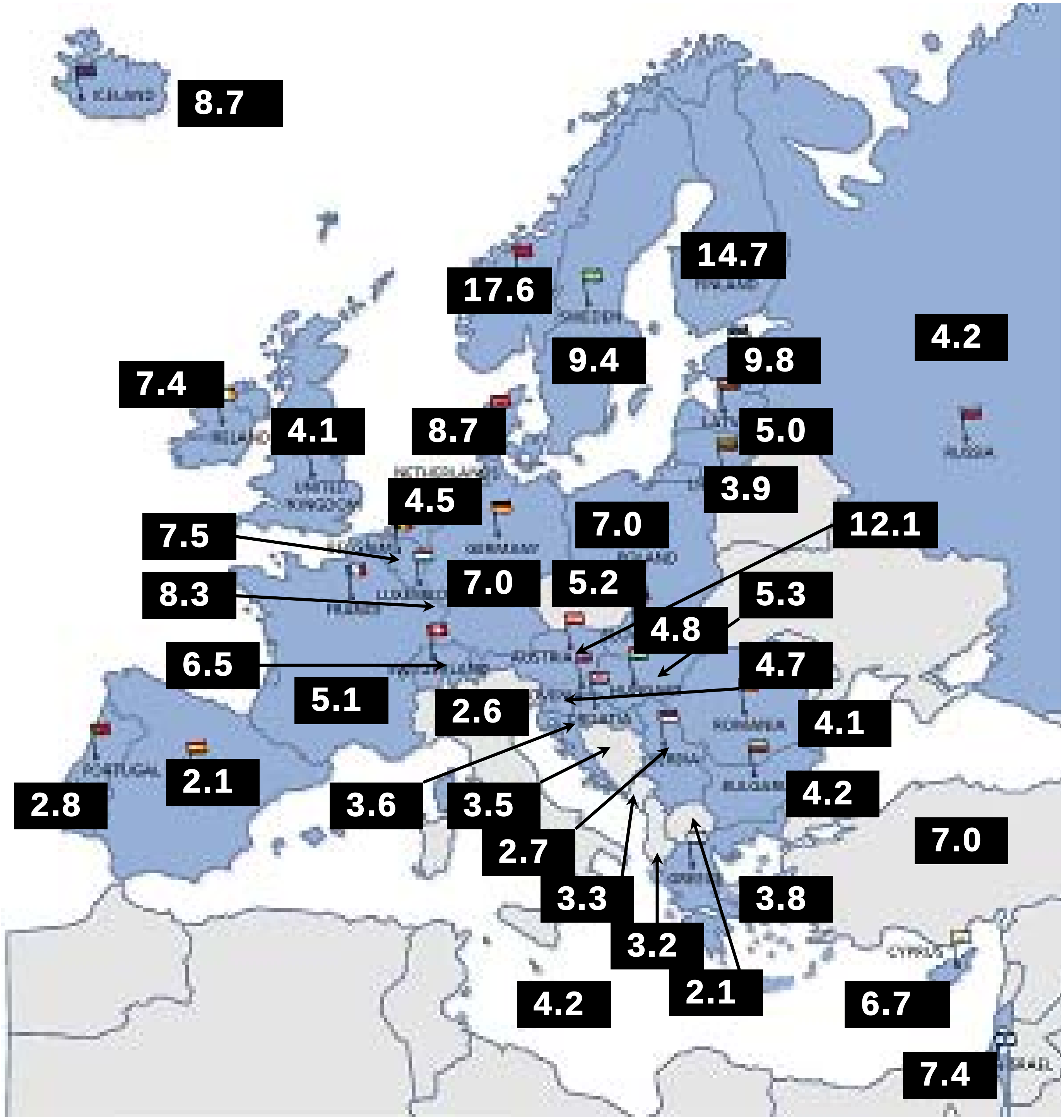
- Leaders: Russia, Germany, Turkey, France, Poland and UK

National Tonnages per Capita

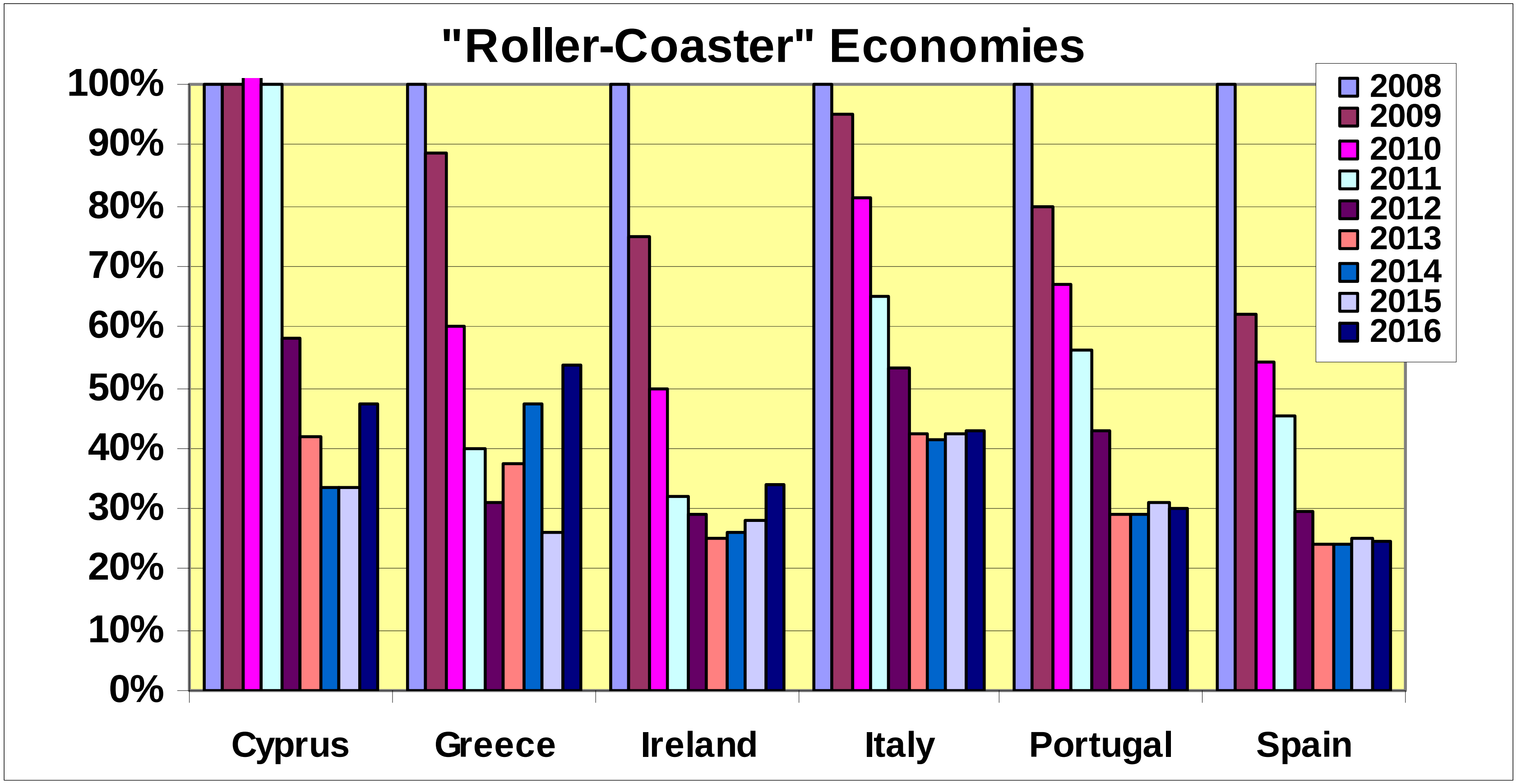


- For EU+EFTA, the 2016 average was 5.2t/c versus 7.2t/c in 2007
- Data for Portugal, Italy and Spain points to future infrastructural deficits

- National **2016** production tonnes/capita across Europe...
- Include exports (mainly from Norway) and exclude imports
- These vary by national climate, terrain, state of economies, building traditions...
- EU28+EFTA average = 5.2t/c

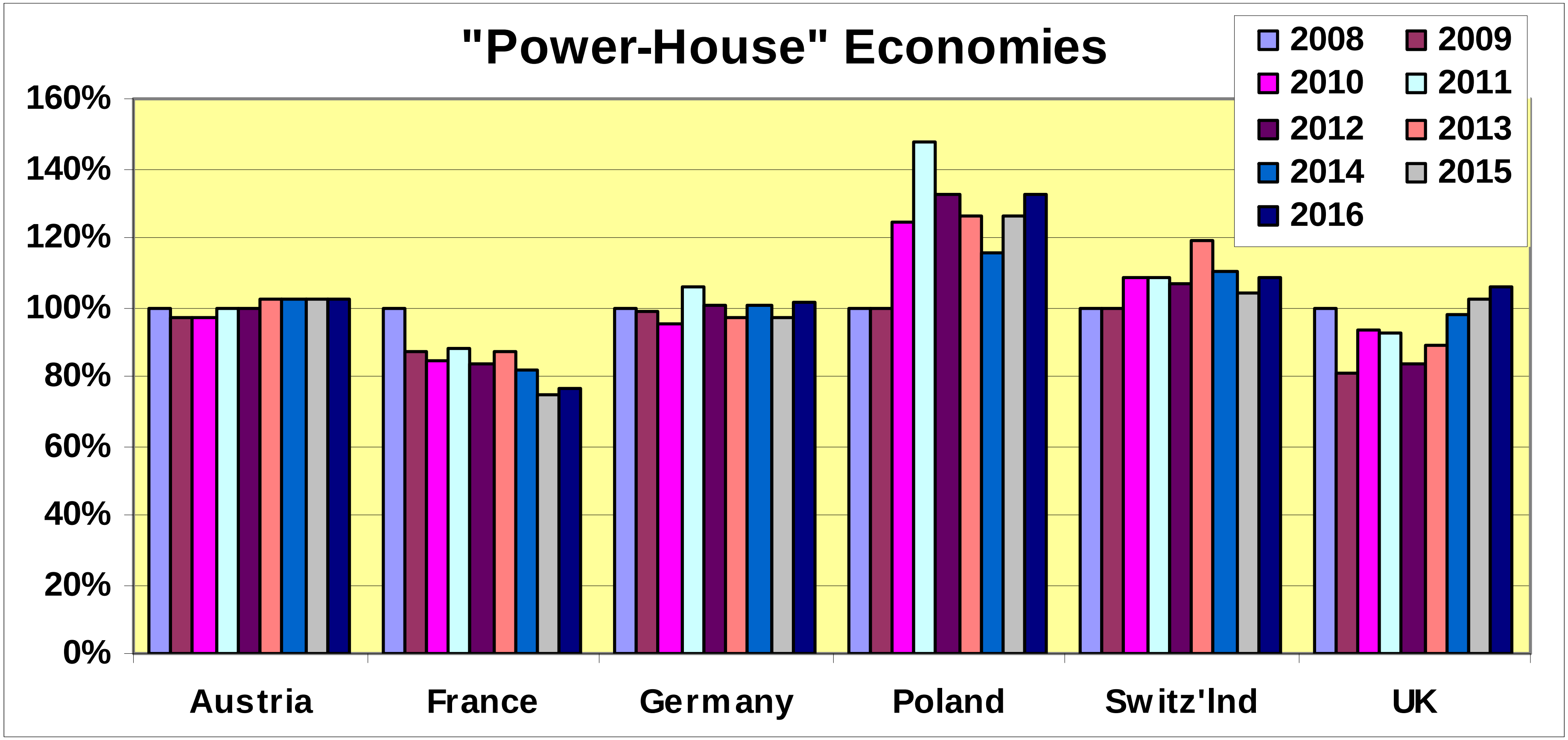


Case Study - 1



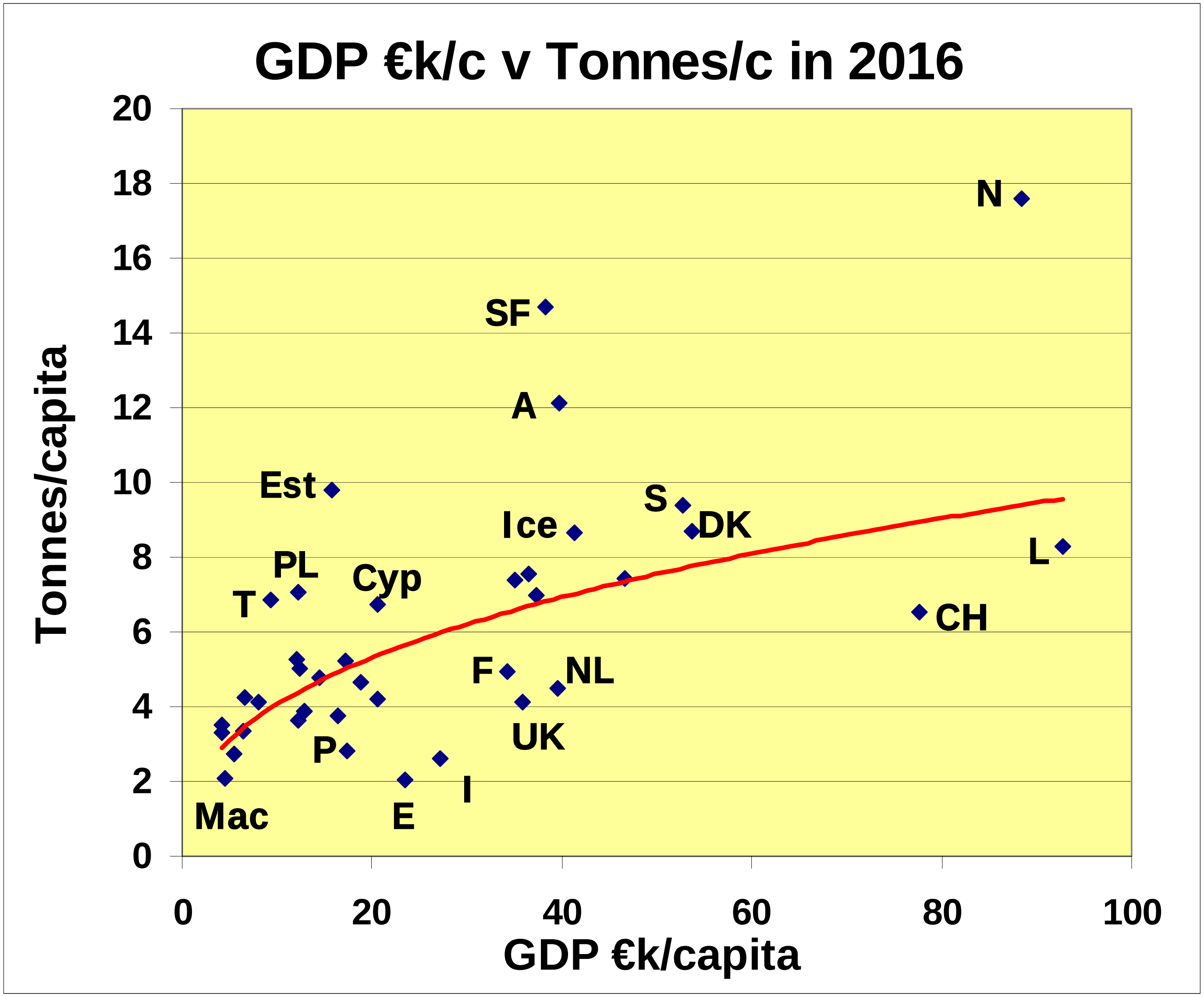
- The six hardest-hit countries, where the 2008 production level is taken as 100%
- Between these six, 700mt of production was lost between 2008 and 2013!
- “The sun also rises again”, but with varying economic recovery trajectories

Case Study - 2



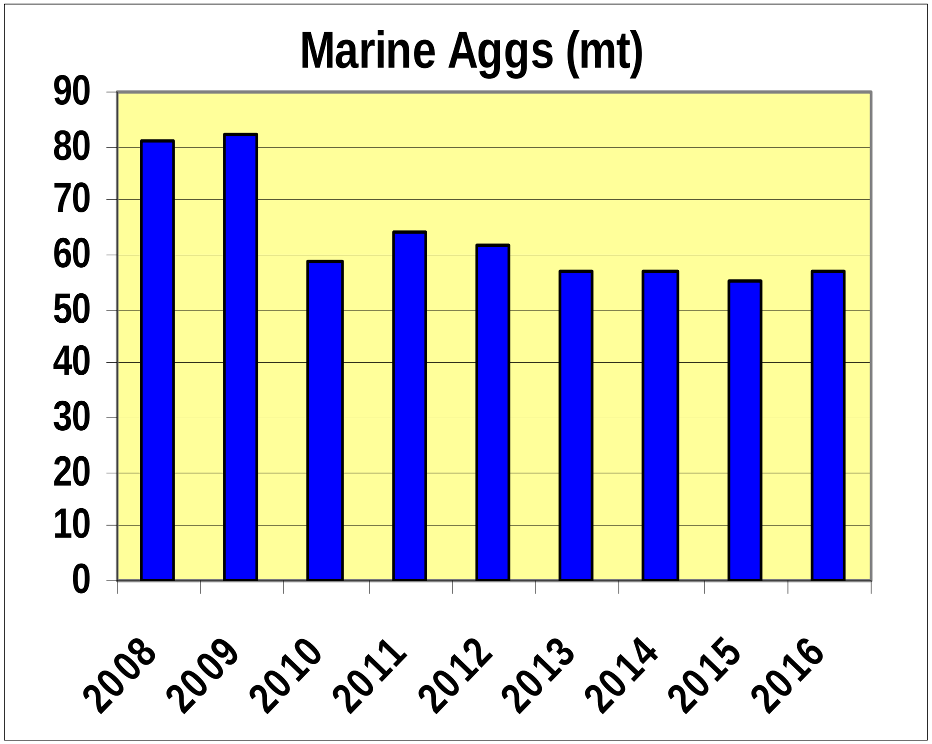
- Again taking the 2008 production level as 100% for these six countries.....
- The total production of these six has remained almost constant 2008 to 2016!
- Interesting to see the different national economic dynamics......

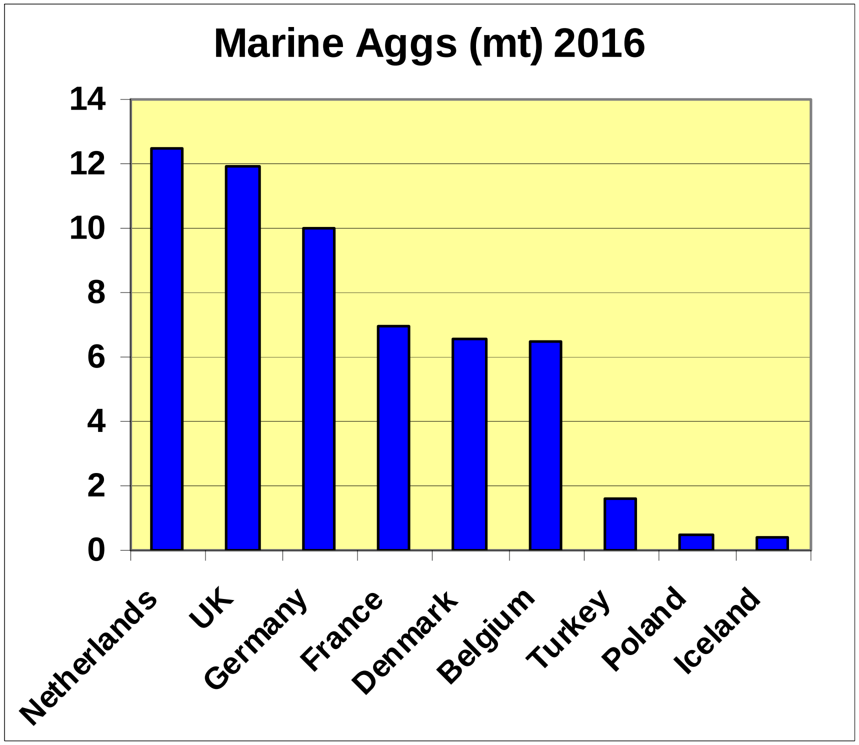
Impact of Economic Growth



- 2016 data shows similar longer-term increase in tonnes/capita as GDP/capita increases
- Some sample countries are highlighted (Norway has a large export component)

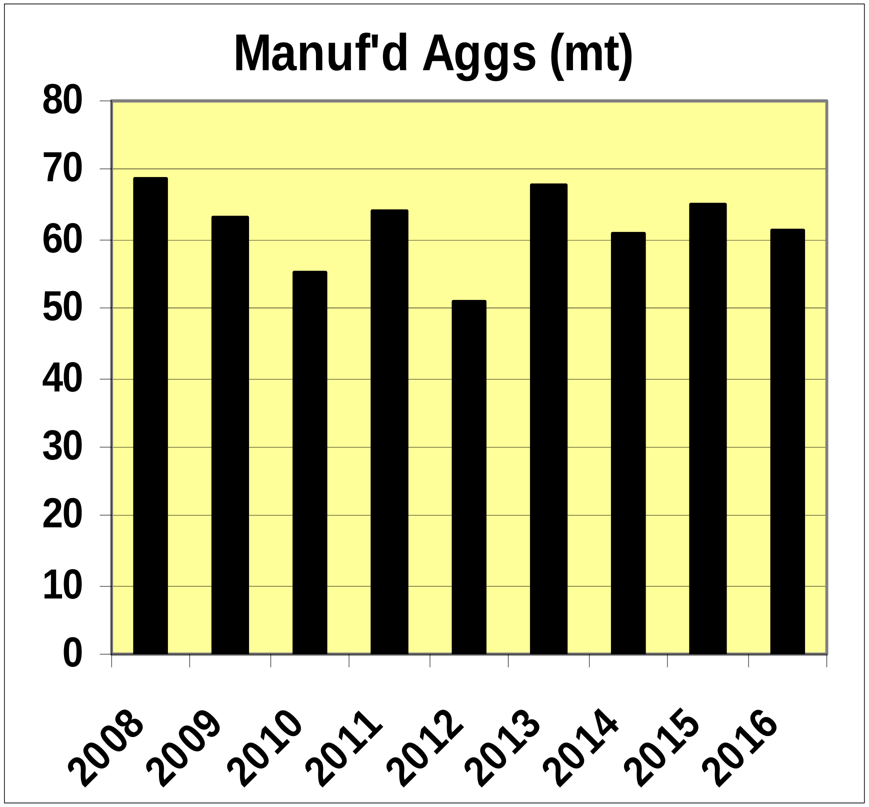
Marine Aggregates

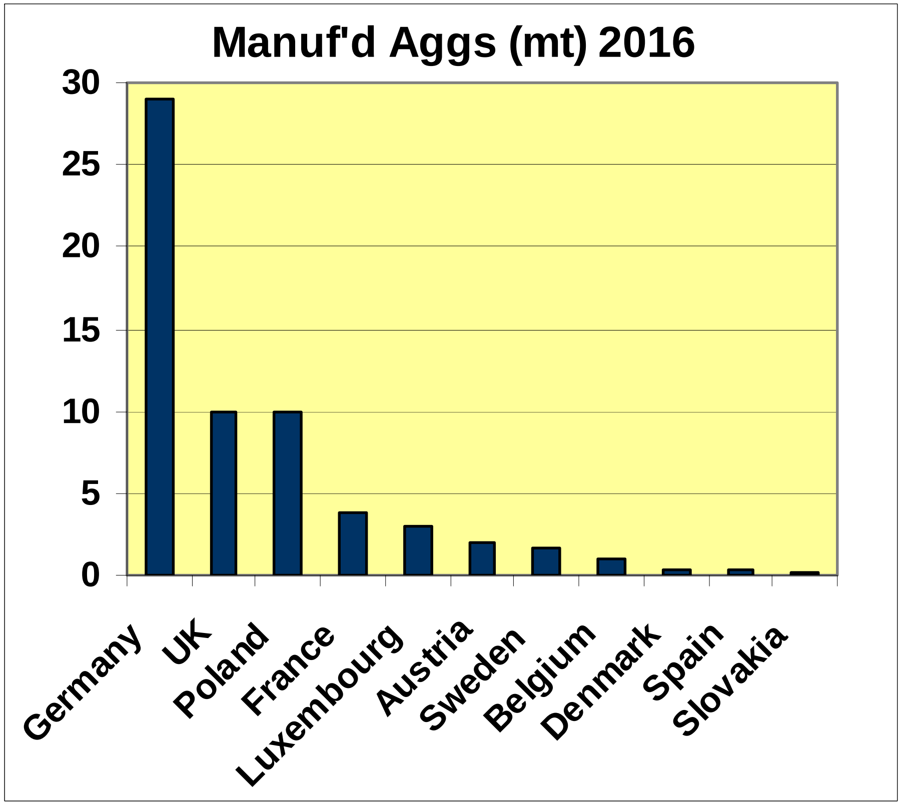




- Surprisingly, the production of Marine Aggregates, at 57mt in 2016, continues at a lower level compared to 82mt in 2009, down 30%!
- Nine countries produce Marine Aggregates, the largest being the Netherlands, followed closely by the UK and Germany
- Figures may exclude aggregates pumped directly onto beaches for reconstruction and so should be reviewed by the Marine Aggregates TF

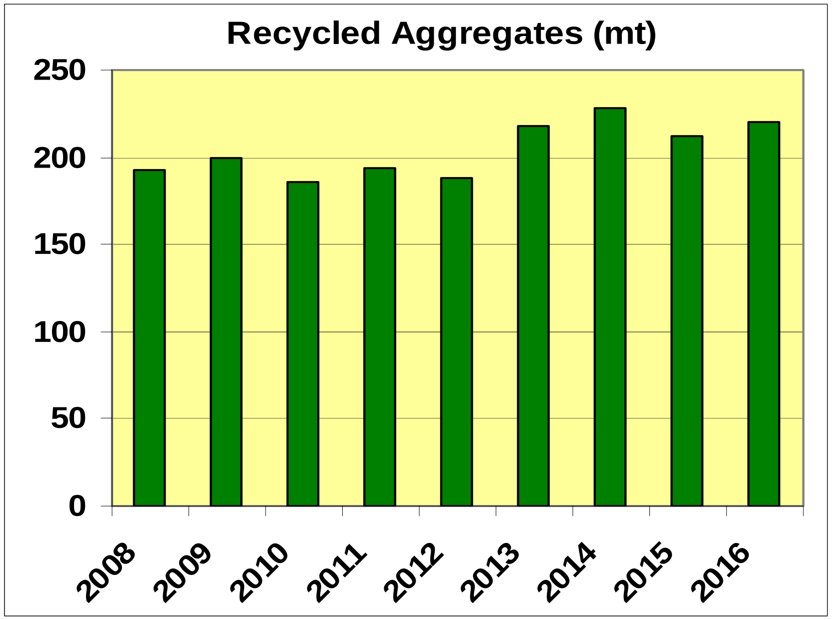
Manufactured Aggregates



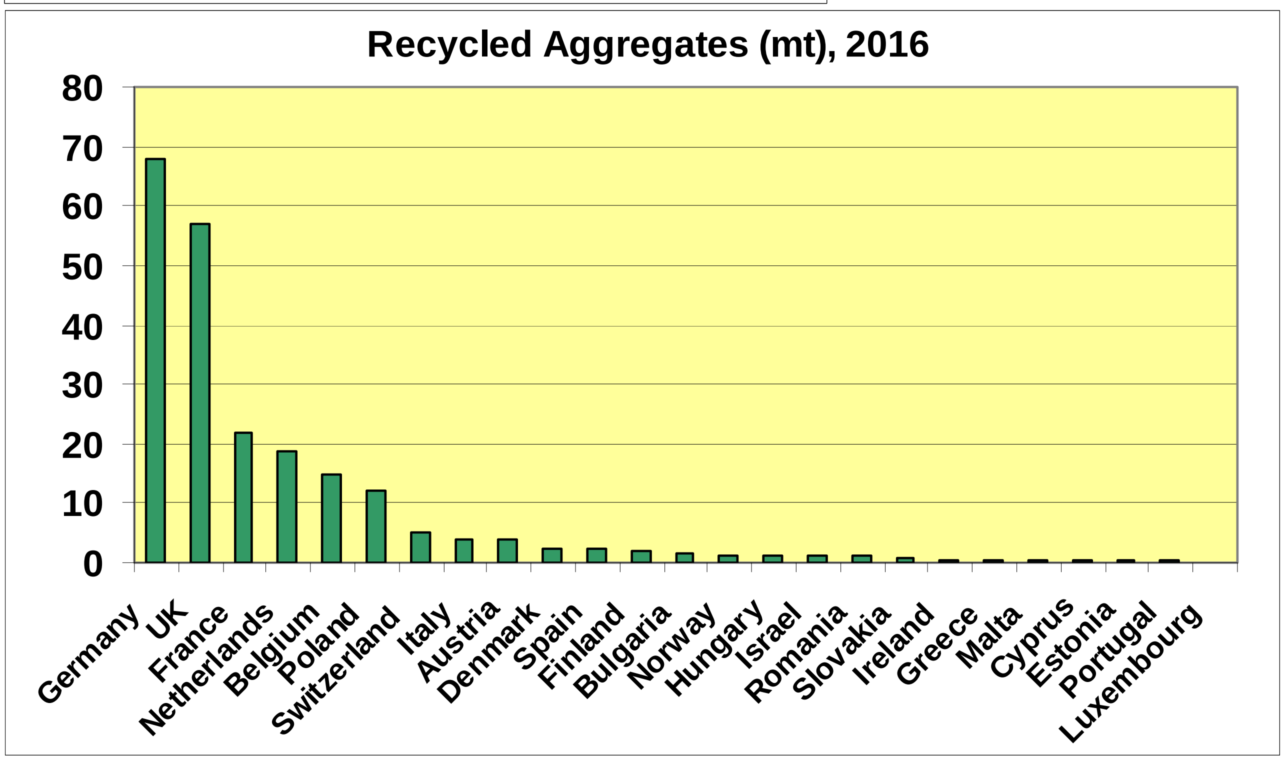


- Production of Manufactured Aggregates decreased to 61mt in 2016 and demonstrates an irregular trend
- Eleven countries produce Manufactured Aggregates, the largest being Germany, followed by UK and Poland

Recycled Aggregates

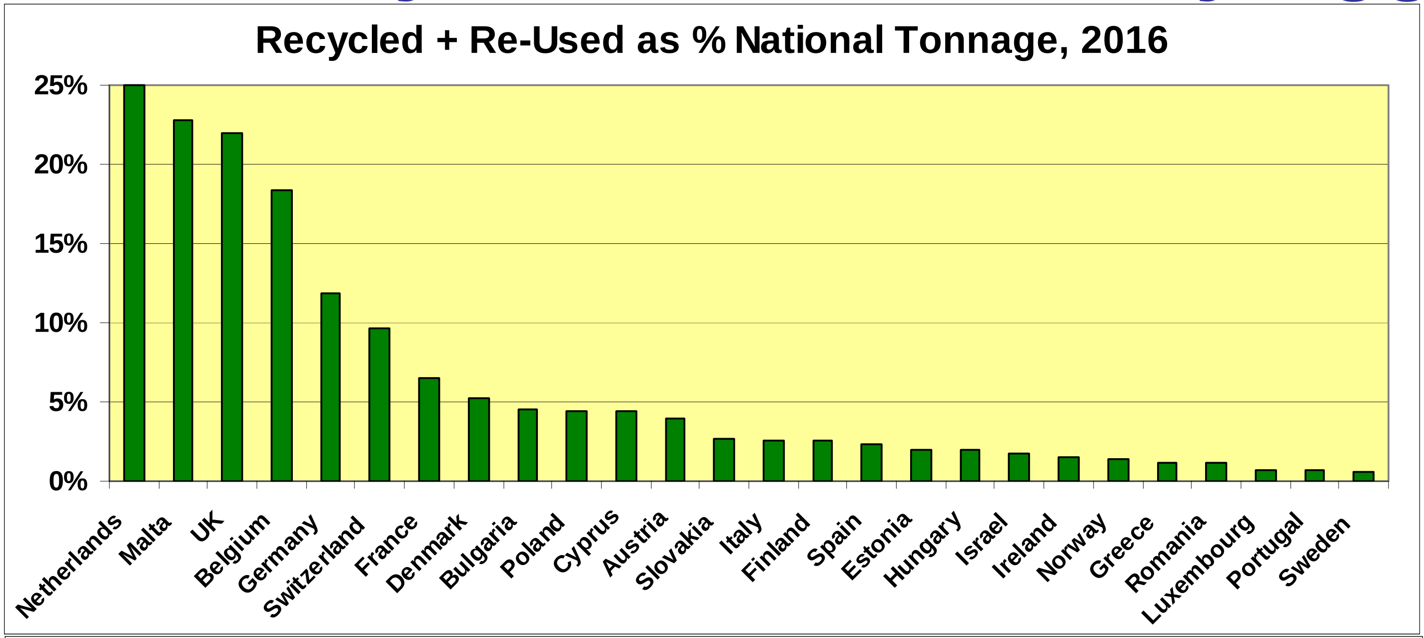


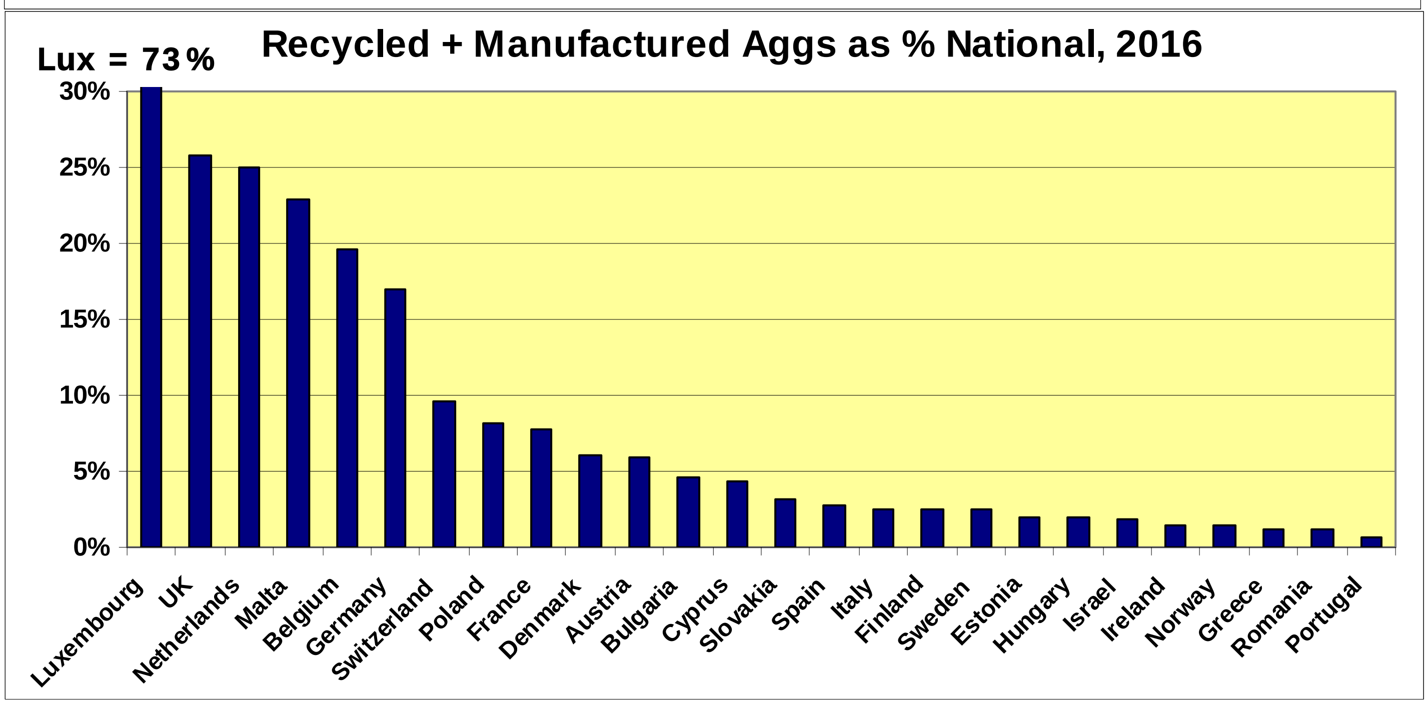
- Production of Recycled (including Reused Aggregates as backfill) increased on prior year to 220mt
- Represents 8% of the total output of 2.73bnt, relatively static in recent years
- Probably still significantly under-reported – get inputs from the EDA?



- Germany leads with 68mt of recycled materials, next UK at 57mt
- Over 40% total EU available C&D is recycled
- Seems that growth in recycling is constrained by over-regulation

% Recycled, % Secondary Aggregates

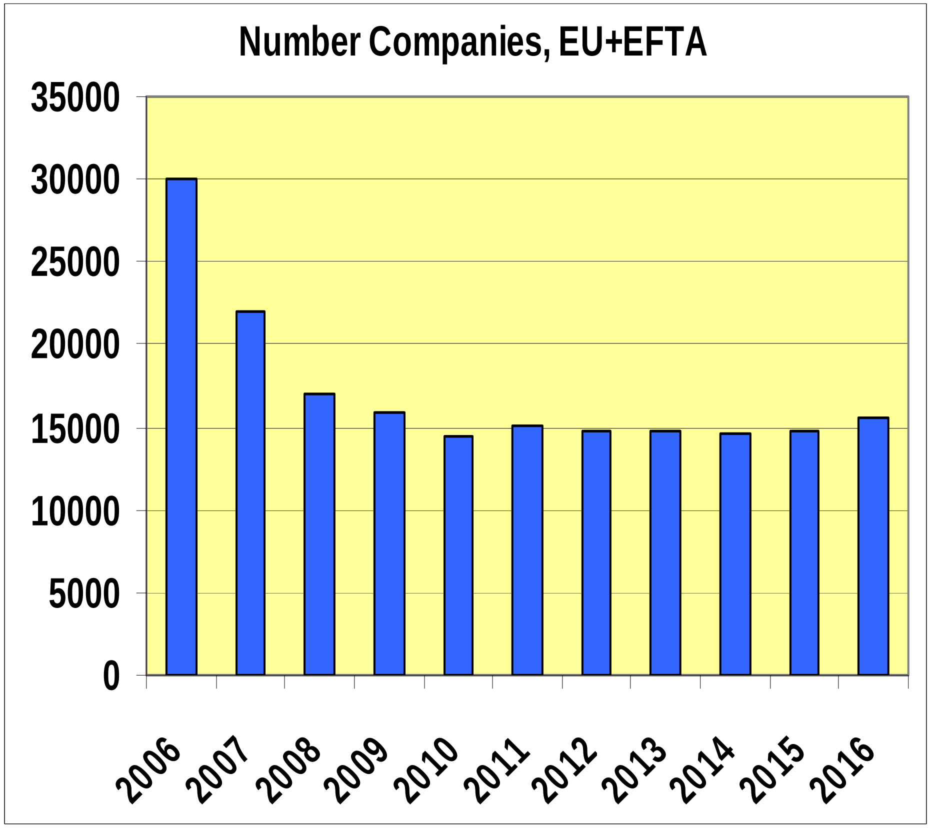




- Upper graph:
- Malta, Netherlands & UK have >20% recycled aggs
- Lower graph:
- Secondary = Recycled + Manufactured
- Luxembourg, UK, NL and Malta have >20%
- For EU+EFTA secondary of 281mt is 10.3% of total production of 2.73bnt

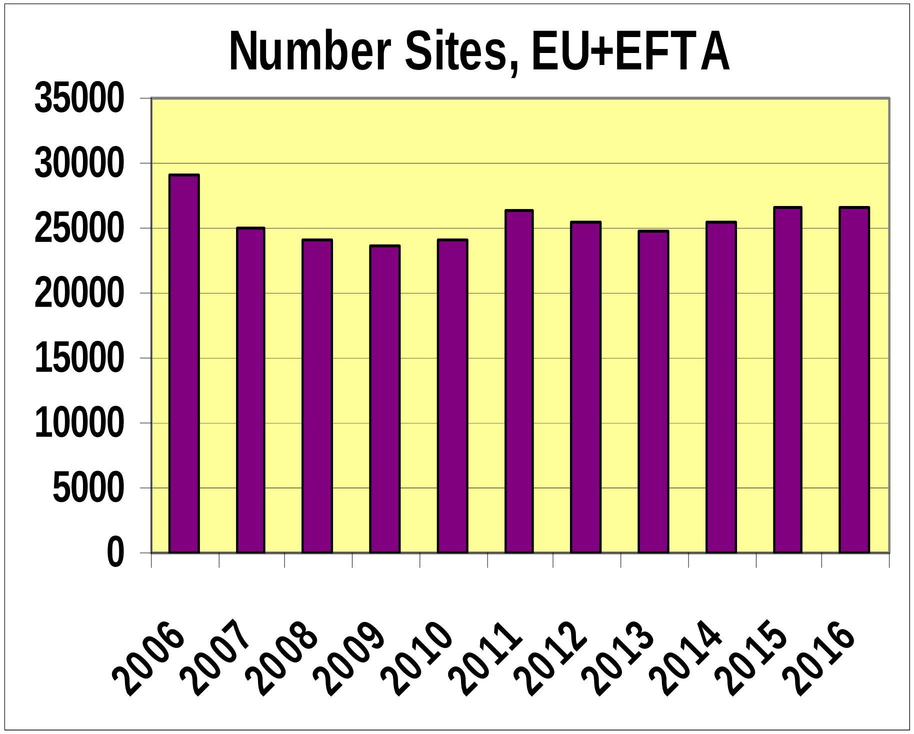
Number of Companies

- In 2016 the number of EU+EFTA Companies rose slightly to 15,600
- Now stabilised after the industry consolidation since 2006; since then half of all companies have been closed or consolidated into bigger players
- On average each Company has 1.7 extraction sites, has 14 people employed and produces 175k tonnes of aggregates
- These figures illustrate the predominance of SMEs in the industry

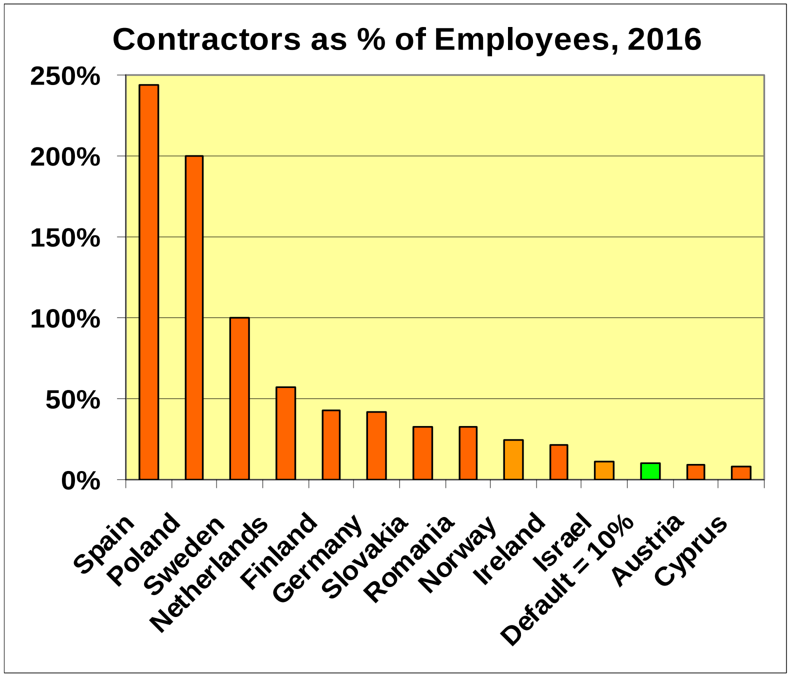


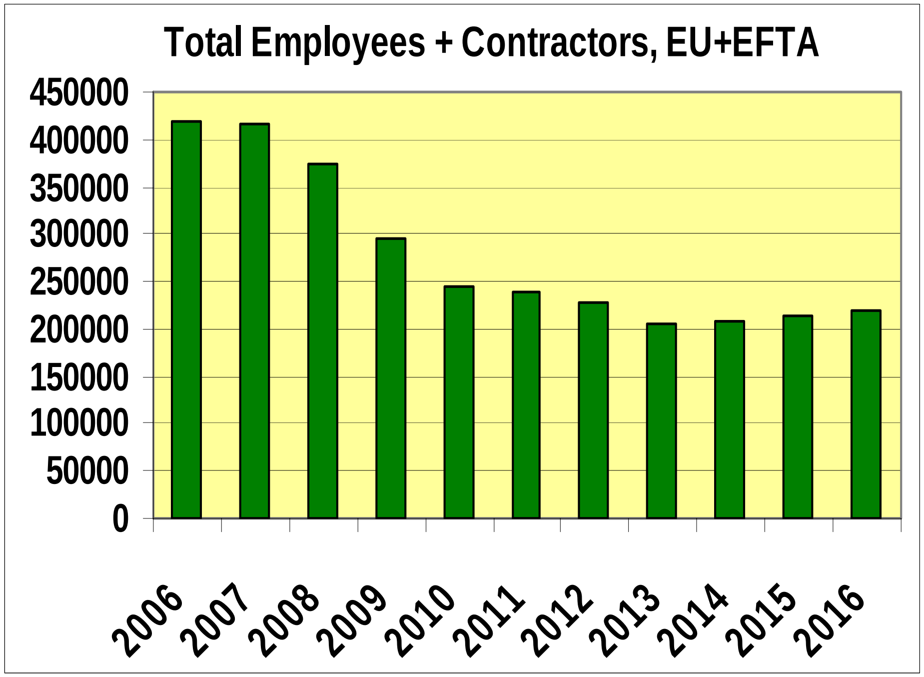
Number of Sites

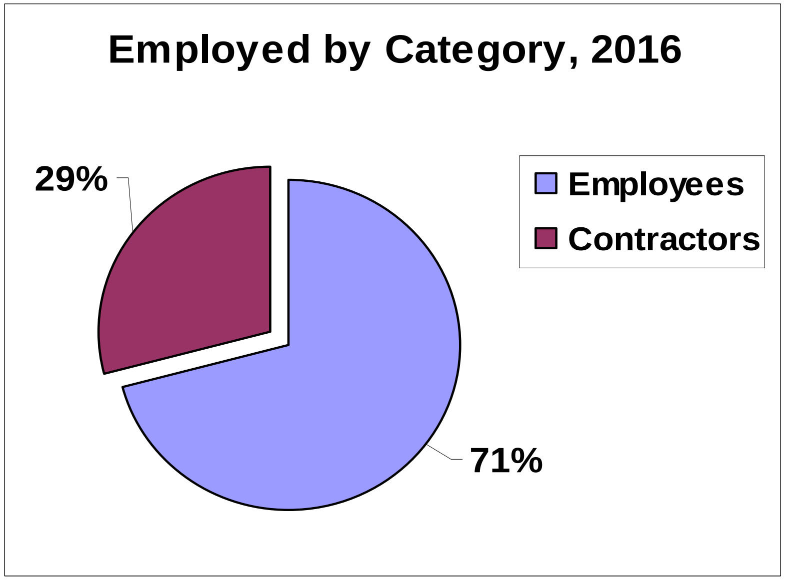
- The number of extraction sites in EU+EFTA in 2016 increased slightly to 26,600
- This has been relatively constant since 2007, indicating sites are kept “alive” even during the economic downturn (probably to preserve permits)
- On average in EU+EFTA, each company owned only 1.7 sites
- Each extraction site produced 102kt of aggregates with just 8.3 people employed
- These figures again illustrate the predominance of SMEs



Numbers Employed

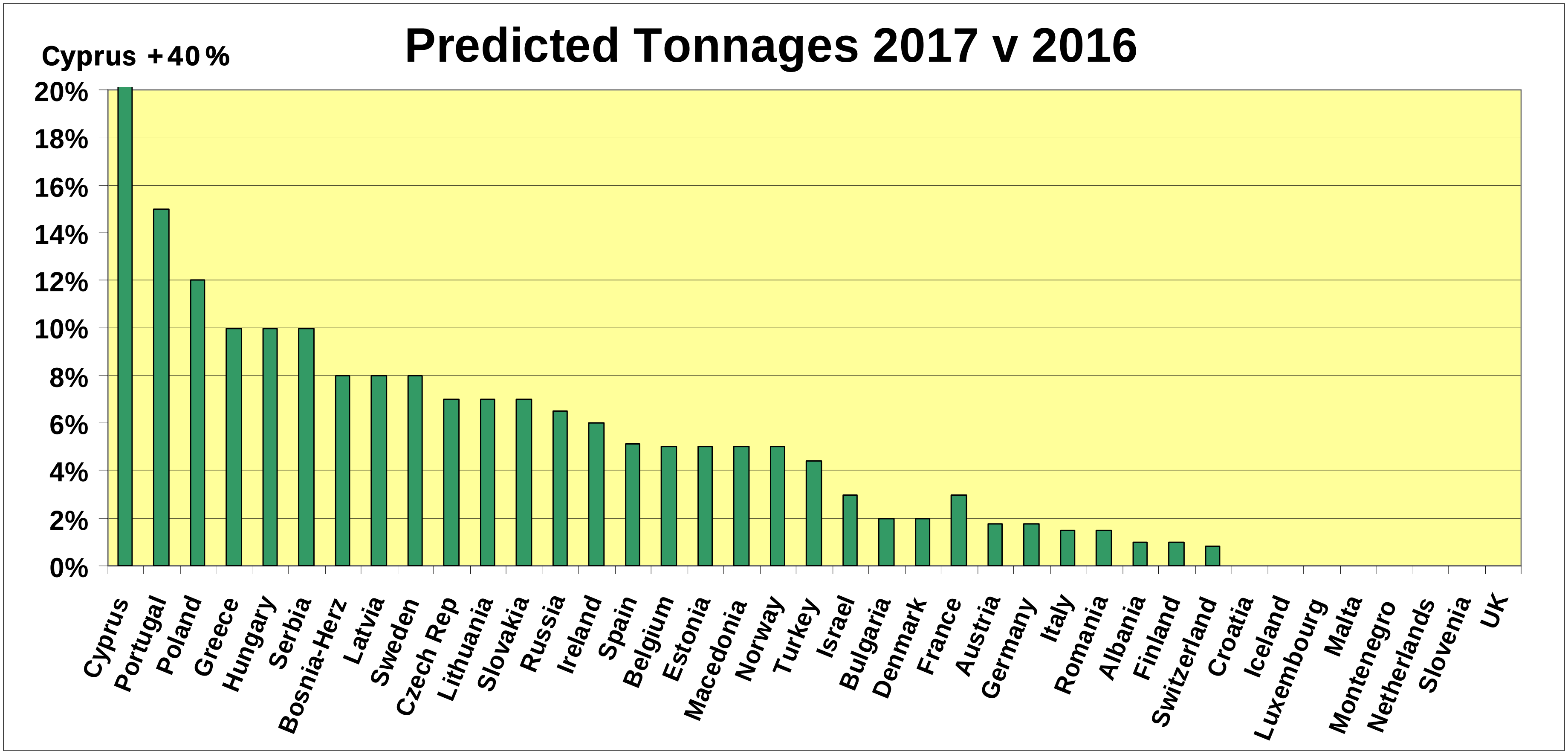






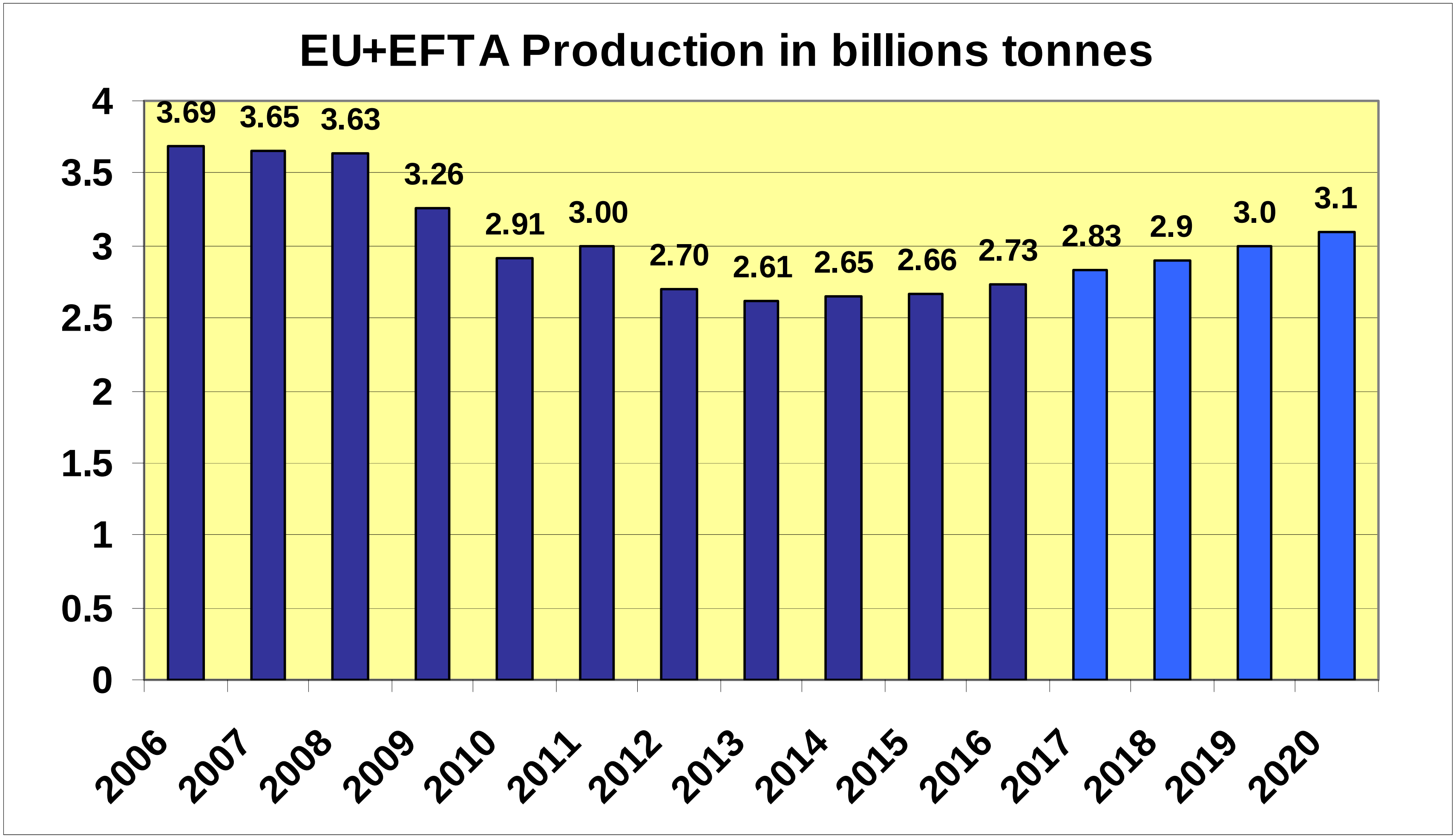
- Total EU+EFTA Employed (calculated as Employees + Contractors) in 2016 was just over 220,000
- Contractor % varied by country; overall 71% (~155k) were direct employees, 29% (~65k) contractors
- Average productivity across EU+EFTA was 12,380 tonnes per year per person employed

And now, the really good news!



- <u>For the first time in a decade every one of the 39 countries is predicting a zero or positive increase in production in 2017</u>!
- Overall a <u>3.9% growth</u> on 2016 is predicted indicating an EU28+EFTA total tonnage of just on <u>2.83bnt in 2017</u>!

Looking into the Crystal-Ball...



- If growth can be maintained <u>EU+EFTA could reach 3bnt by 2019</u>
- Essentially making up for the decade lost due to the financial crisis...

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Thanks to All for Sharing their Data!

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