



Conference part 3. Workshop

Industrial emissions. EU revision of BREF documents for the fishmeal industry

Fishmeal for the future – the good story about fishmeal

Current and future use of by-products





Revision of BREF & BAT conclusions – An EUfishmeal project

**It is our attitude
at the beginning
of a difficult task
which, more than anything else,
will affect its successful outcome.**
~ William James



Revision of BREF & BAT conclusions – An EUfishmeal project

BAT (best available technology) conclusions

- will set up Mandatory Emission Limit Values
- mandatory for all facilities to comply with within 4 years

If the fishmeal industry wants to influence the BAT conclusions

- active and comprehensive action is needed
- early action is necessary

The BREF-proces

(Indicated time is the duration of the individual step)

	Step	Time (months)
1	Reactivation of Technical Working Group (TWG)	
2	Call for wishes	1 – 2
3	Kick-off meeting in (TWG)	1 – 2
4	New information from installations	6
5	First draft BREF	4 – 6
6	TWG comments (possible meeting)	2 – 3
7	(optional second draft and TWG comments)	5 – 10
8	Final TWG meeting	3 – 5
9	Final draft BREF	4
	<i>Total</i>	<i>26 - 38</i>

Steps and expected time based on "Commission Implementing Decision of 10 February 2012 laying down rules ... on ... BAT reference documents." (2012/119/EU)

Revision of BREF & BAT conclusions - an EUfishmeal project

Action	Responsible	Estimated cost, Euro
Establish internal project group – technical expert from each member country	EUfishmeal GA	
Benchmark (collection of data) of all factories Starting point: current BREF compliance	External adviser (assisted by project group and EUfishmeal secretariat)	8.600
Evaluate data and identify potential problems	External adviser (assisted by project group and EUfishmeal secretariat)	7.500
Prepare for kick off meeting – present industry view	External adviser (assisted by project group and EUfishmeal secretariat)	5.500
Assist industry in submitting data Responsible for data processing and participation in meetings in Technical WG	External adviser (assisted by project group and EUfishmeal secretariat)	Up to 133.000



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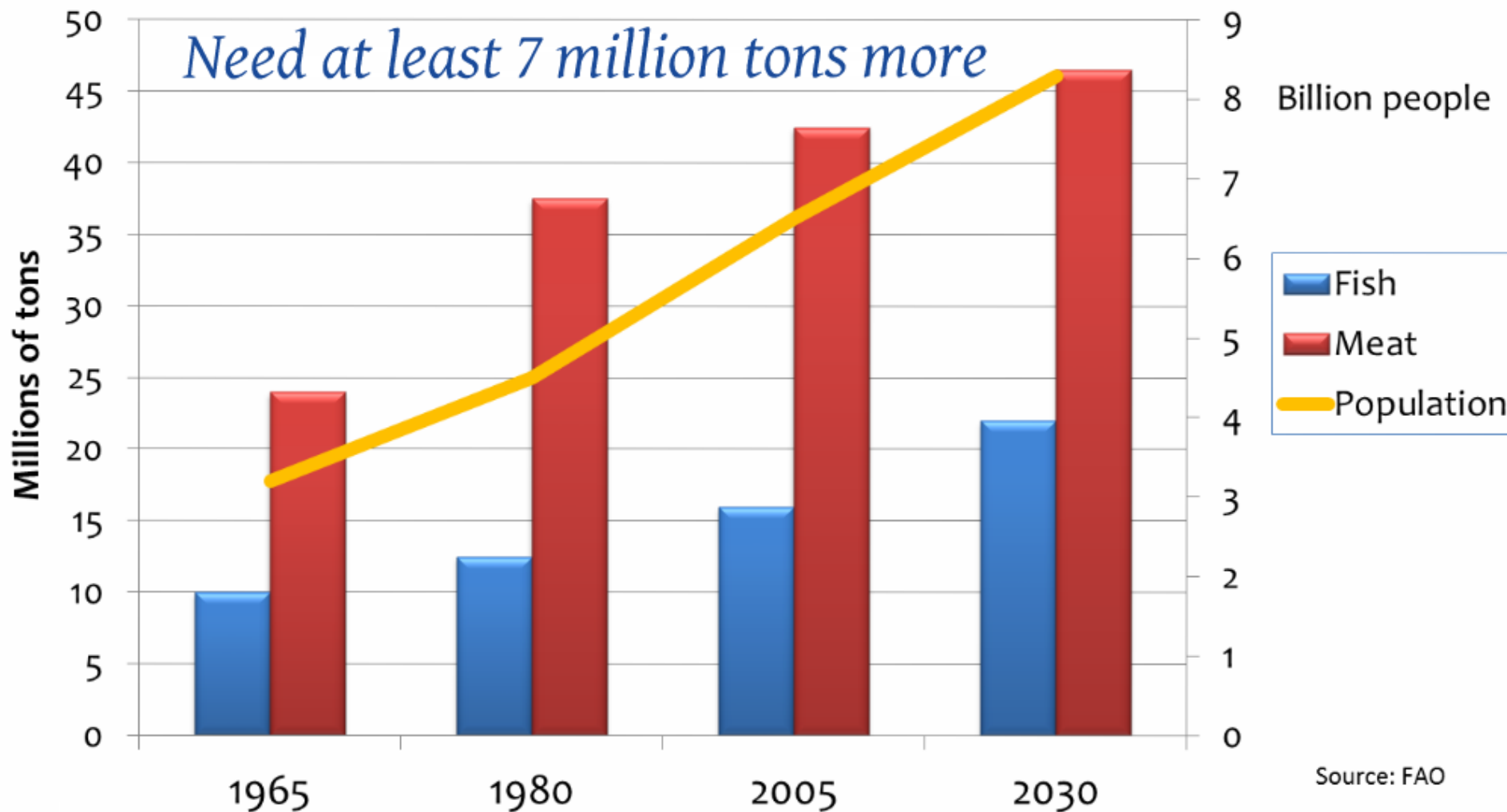
Fishmeal for the Future/The good story about fishmeal



Friday August 28th 2015, Vestmannaeyjar



Feeding the global human population



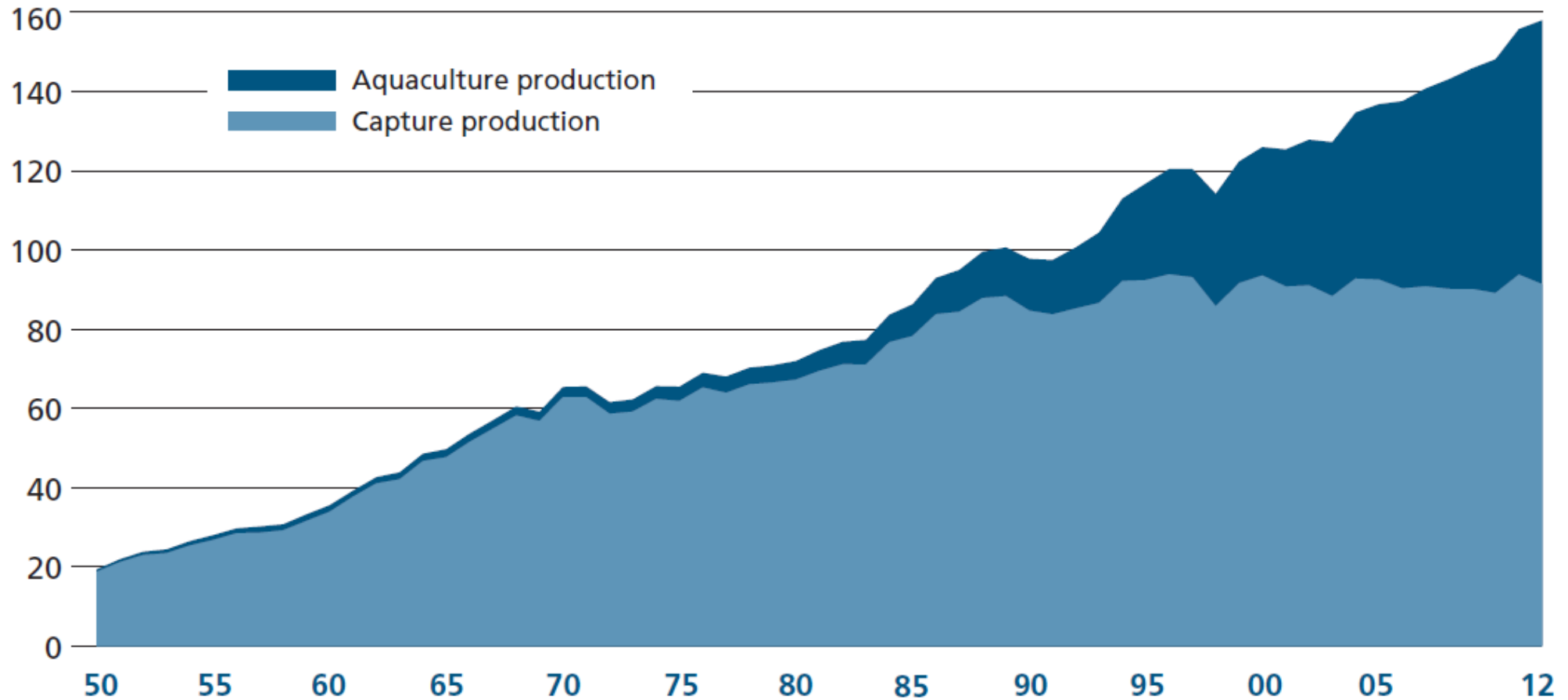
Source: FAO



The State of World Fisheries and Aquaculture 2014

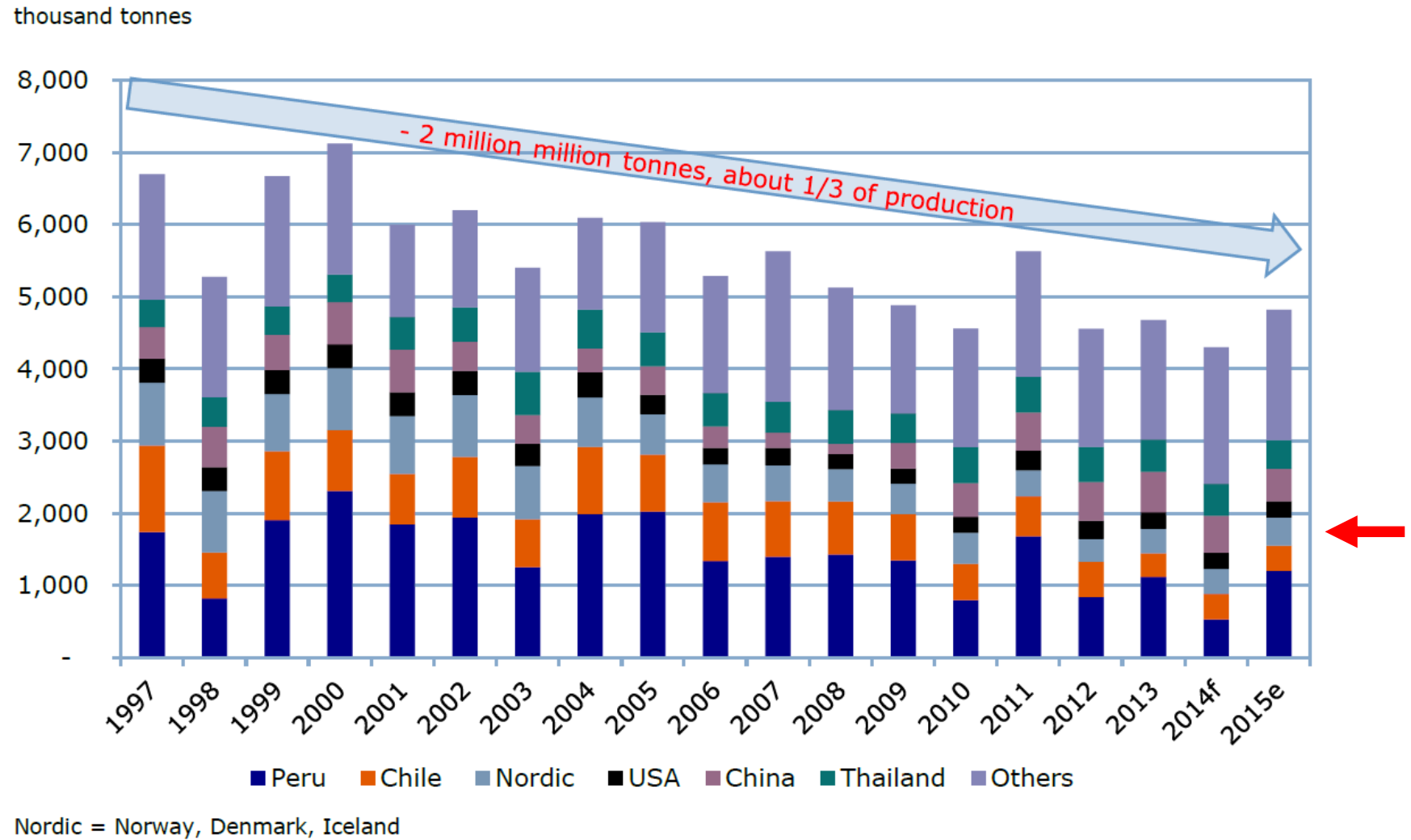
World capture fisheries and aquaculture production

Million tonnes





Declining global fishmeal production 1997-2015

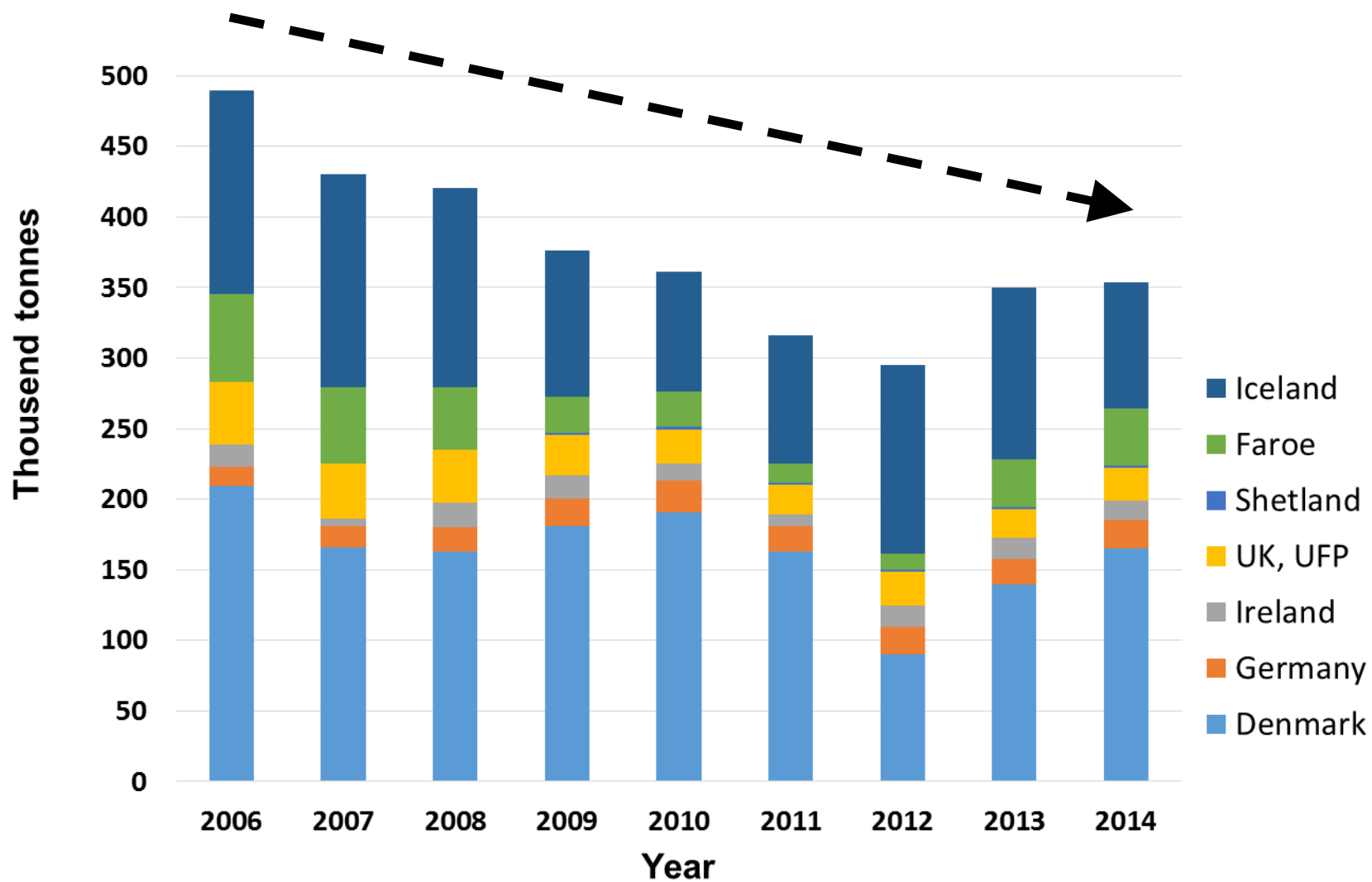


Source: Rabobank, Kontali, IFFO, 2015

Rabobank Industry Note #494 - June 2015

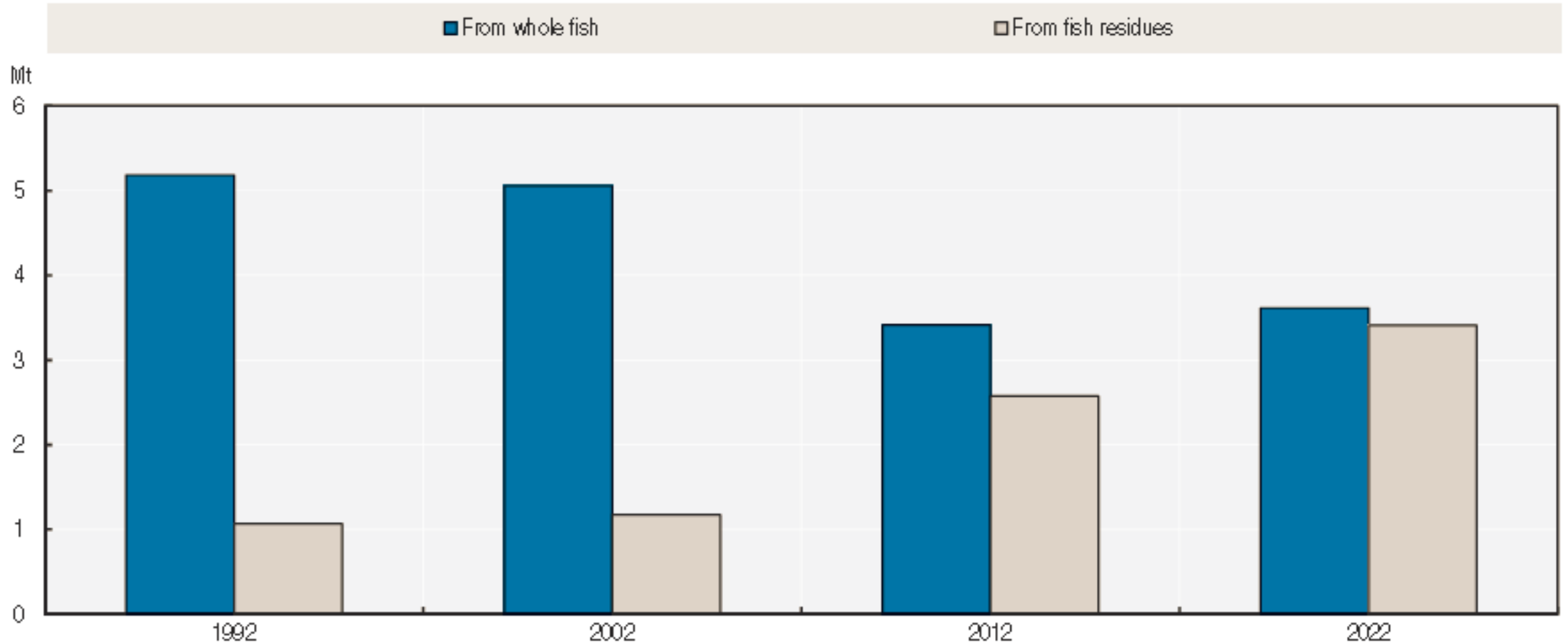


Declining EU fishmeal production 2006-2014





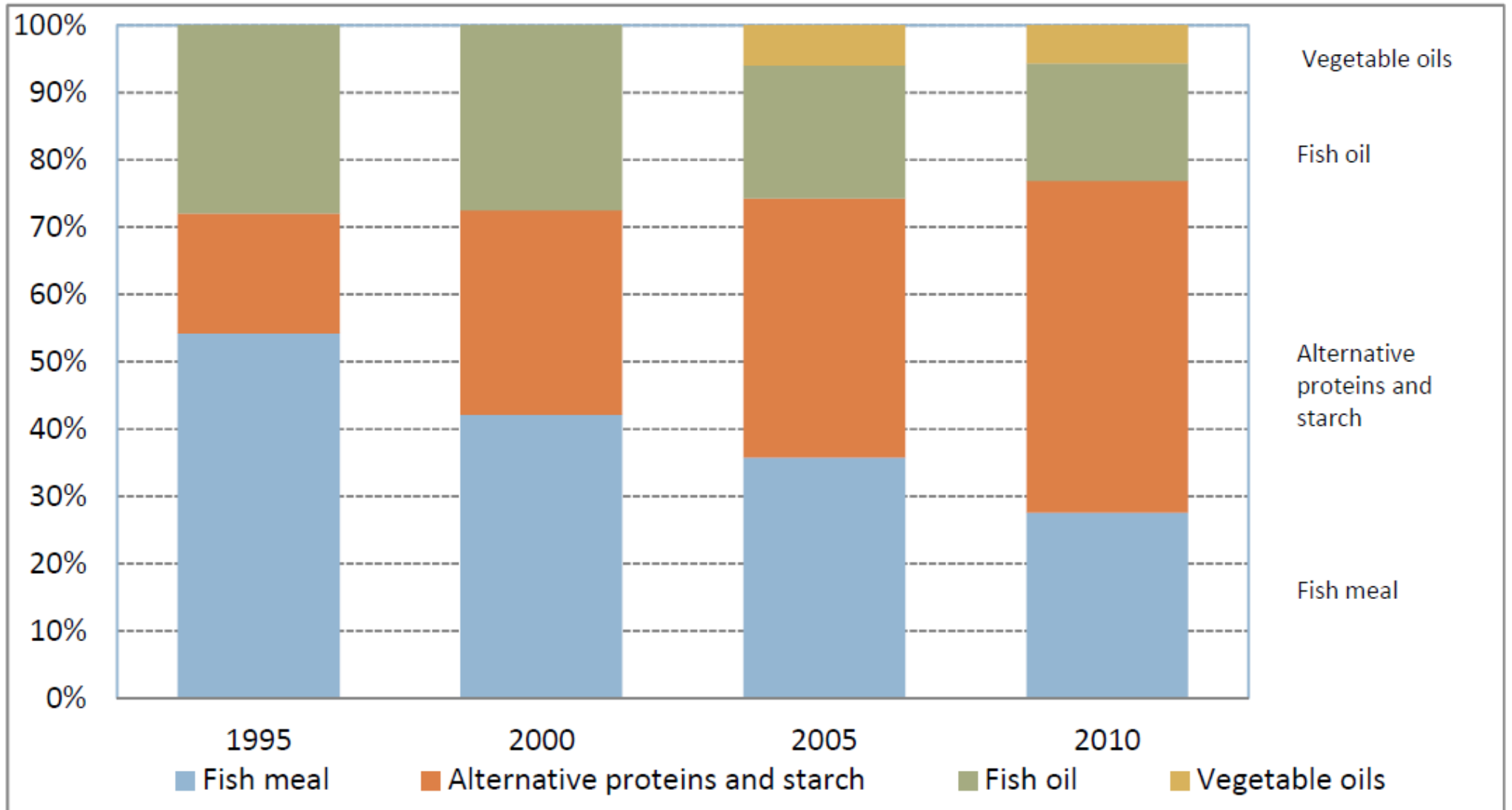
Increasing share of fishmeal obtained from fish by-products



Source: OECD and FAO Secretariats.



The composition of Norwegian *Salmo salar* feed over the period 1995–2010



(UPDATE: For 2013 inclusion is 15 % fishmeal and the oil content is 1/3 fish oil and 2/3 vegetable oil .

Some major producer grower diets are down to 10 % fishmeal.)



The Appeal of Fishmeal

Fishmeal's Transformation from a Commodity to a High-Price Strategic Marine Protein

The role of fishmeal is changing. High prices, driven by both falling supply and rising demand, are forcing a rationalisation of users. Only those who can find a strategic or functional role for fishmeal beyond simply its high level of protein are able to pay the higher costs. As fishmeal becomes a strategic ingredient, its historical correlation to alternative vegetable-based protein sources is likely to wane, as has already been the case for fish oil and vegetable oils. This would have implications for many players in both the aquaculture and wild catch industries.

Rabobank Industry Note #494 - June 2015



Projects in support of the use of fishmeal and fish-oil

Outcome from the EUfishmeal meeting 12 March 2015 in Copenhagen:

- *Full support to the project proposal: “The good story about fishmeal”.*
- *The first step is the establishment of a steering group consisting of participants from EUfishmeal.*
- *The steering group to steer projects – give advice on project proposals, project plans, and project funding opportunities.*



The Benefits of Fish Meal in Aquaculture Diets

- The "unknown" growth factor
- Protein Quality of Fishmeal
- Lipid Content in Fishmeal
- Energy in Fishmeal
- Mineral and Vitamin Value of Fishmeal
- Economic and Environmental Considerations of Fishmeal Utilization



Project ideas

Two research proposals for consideration:

1. “Life cycle fish health and cost-benefit gain from using high marine inclusion versus low marine inclusion feed”
2. “Meat versus salmon: climate impact through life cycle assessment”

A conference sponsored by Nordic Council of Ministers:

- “Perspectives for the future demand for fishmeal and fish oil”
- Nordic Marine Think Tank (Leader Carl-Christian Schmidt formerly OECD)
- Network project
- 2016
- ~100 participants
- To be developed by a steering group under NMTT and EUfishmeal



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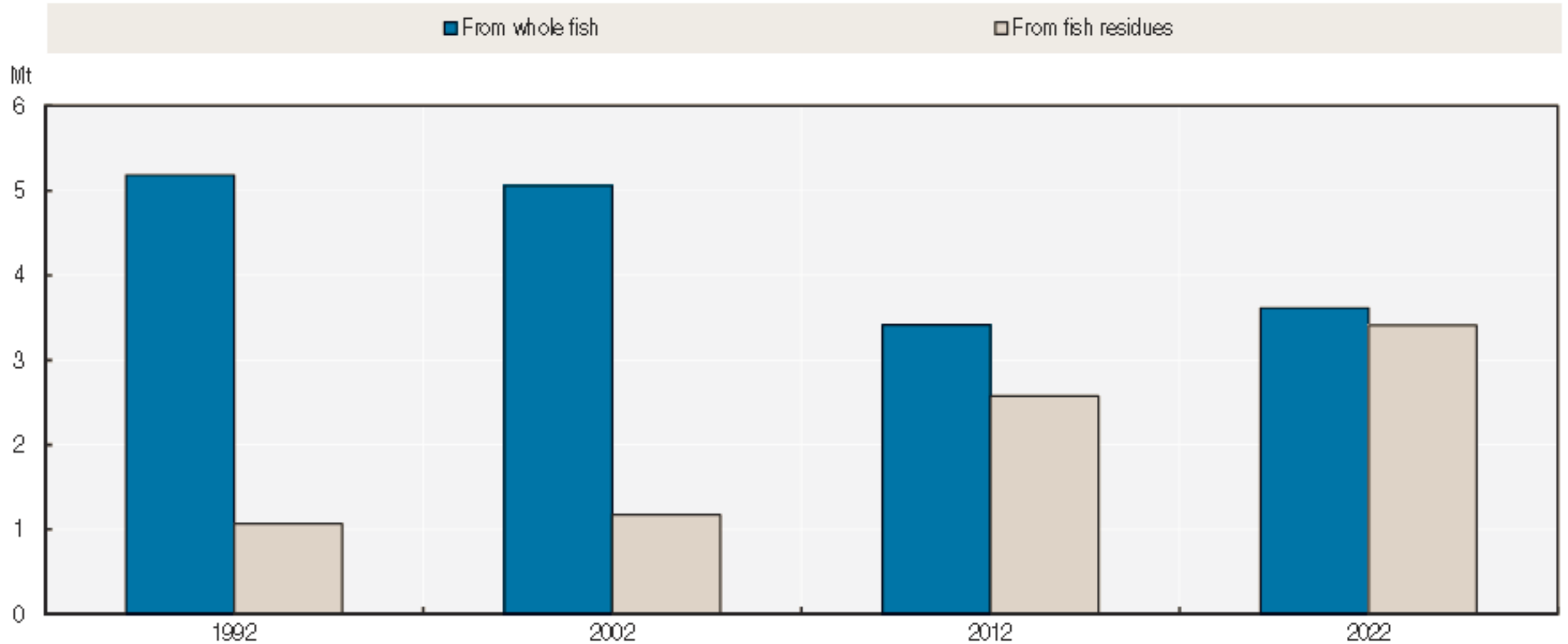
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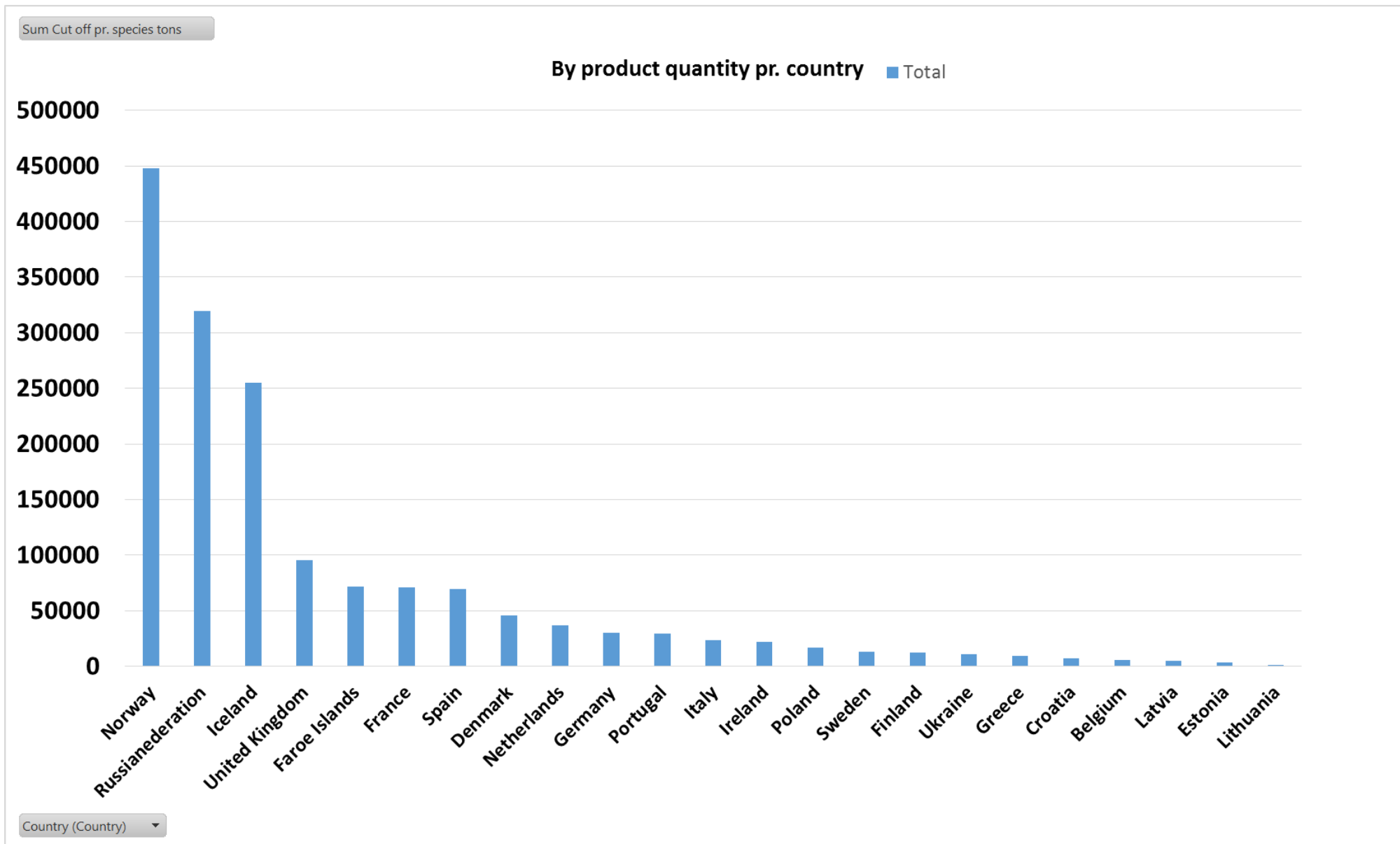
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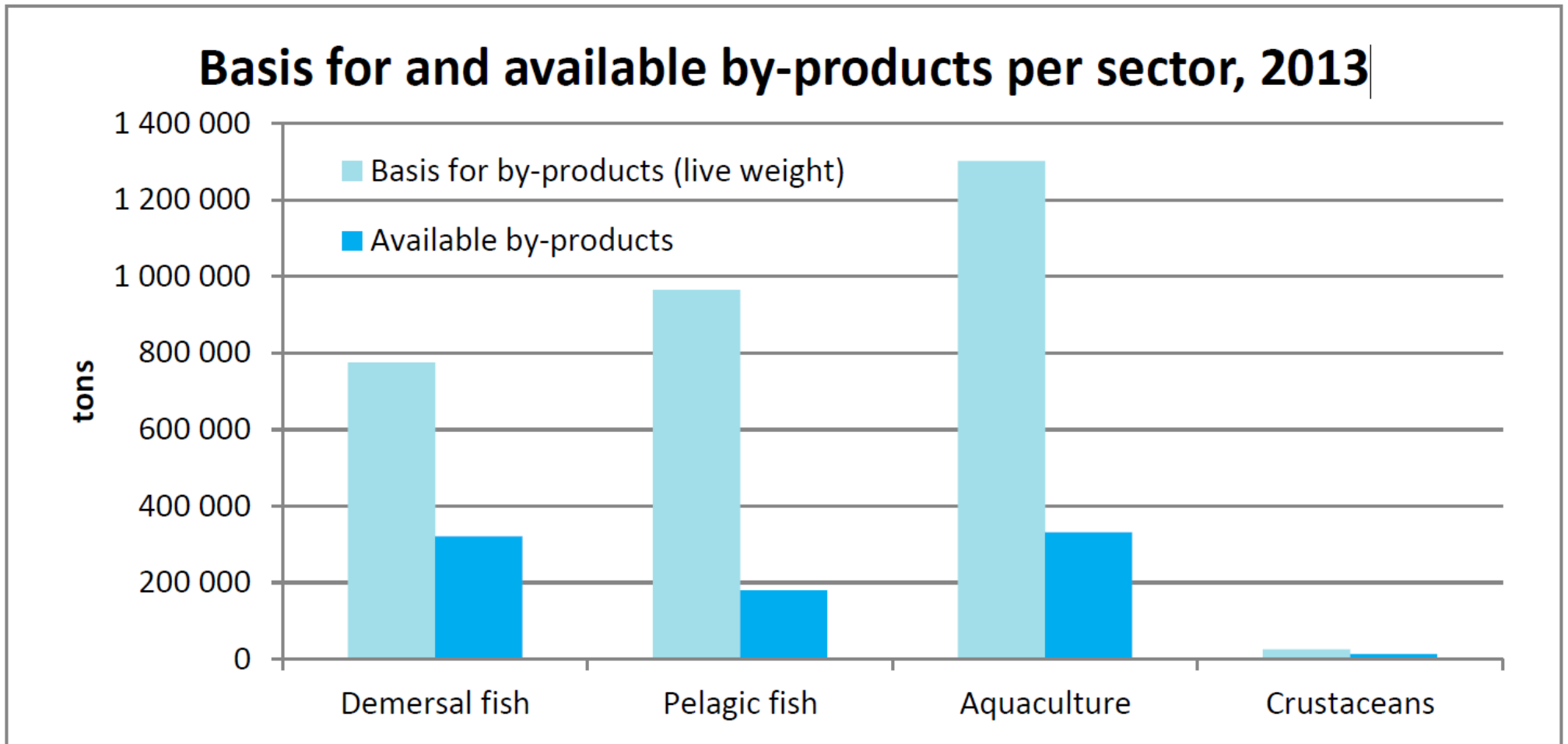


Estimated quantity of fish by-products by country





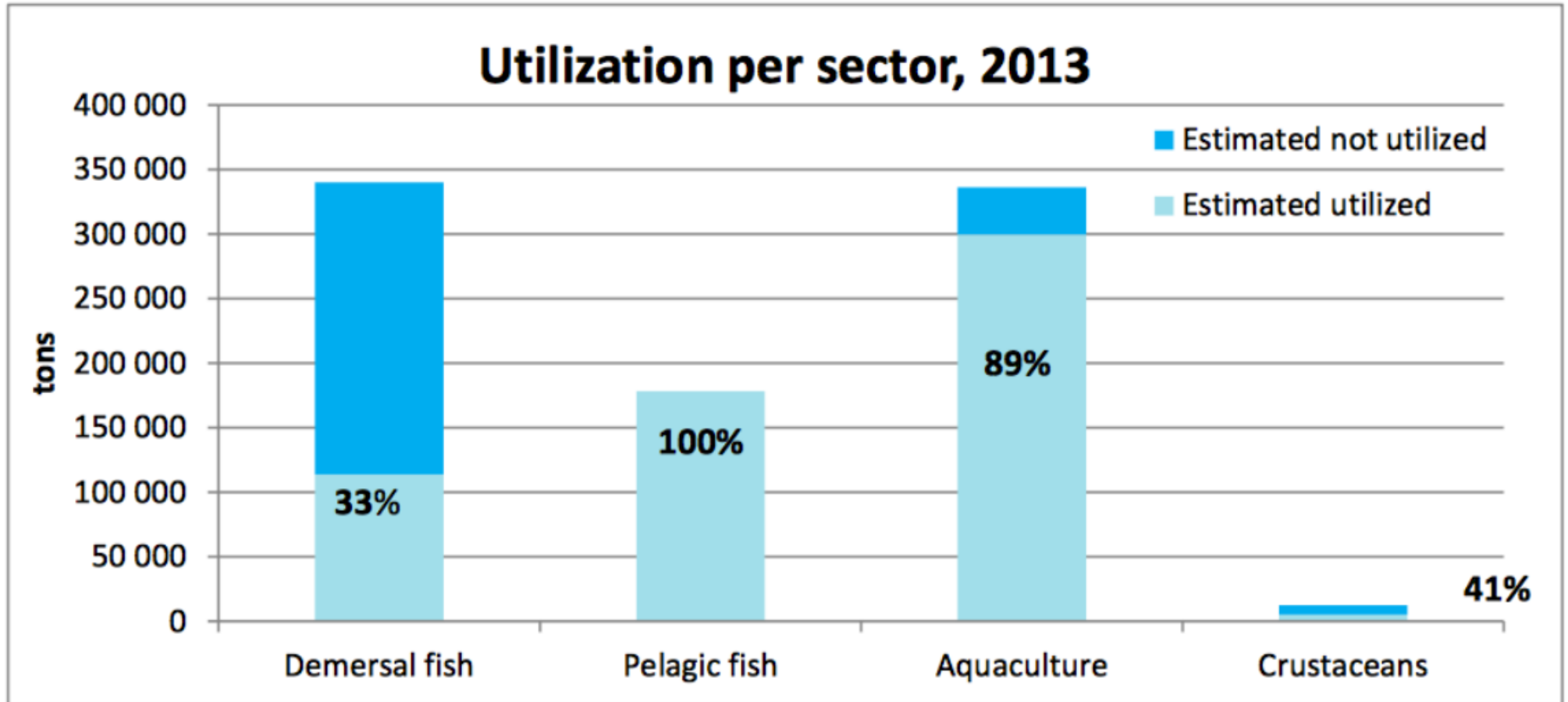
Percentage utilization of the fish by different sectors in Norway



Source: Directorate of Fisheries, Statistics Norway, Norwegian Seafood Council, Sales organizations, Kontali Analyse og SINTEF



Percentage utilization of the fish by different sectors in Norway



Source: Directorate of Fisheries, Statistics Norway, Norwegian Seafood Council, Sales organizations, Kontali Analyse og SINTEF



Presentation by Bodo von Holten



Thank you for attending the Conference 2015

**We look forward to see you all
in Ireland 13-16 September 2017**

Presentation will be uploaded to:

<http://www.eufishmeal.org/>