WORLD SALT SYMPOSIUM

June 19-21, 2018 Park City UT, USA

CO_2 Footprint:

Comparison between Rock Salt, Sea Salt and Vacuum Salt

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CO_2 Footprint

sustainability

green economy

environmentally friendly

energy efficiency

life cycle assessment

resource efficiency

second life

and many more…..

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CO_2 Footprint

- very important topics
- but what is behind the story…?
- a holistic view is needed: besides the production, logistics also need to be taken into consideration

=> life cycle assessment is the only way to determine the "global warming potential" of a product

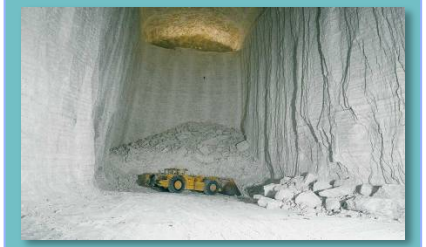
- BUT it can not be generalized
- It has to be evaluated on a case-by-case basis
- not always the most environmentally-friendly product is the right one for a special application

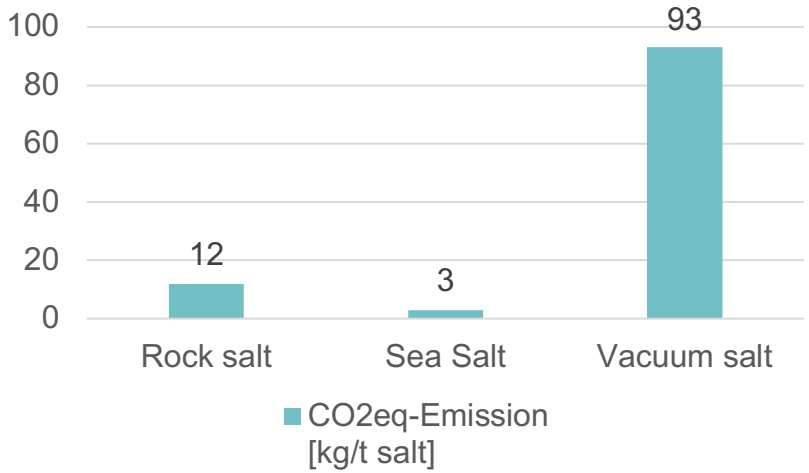
CO_2 Footprint

- Salt is a commodity and is used in over 14,000 applications
- Some applications need a special type of product, e.g. pharmaceutical applications demand high purity and special packaging requirements
- But in the vast majority of applications (for example, in the food or feed industry), there is no need for a special product and the user can decide whether to use a rock salt, sea salt or vacuum salt
- more and more users take both the product quality and economic factors into account

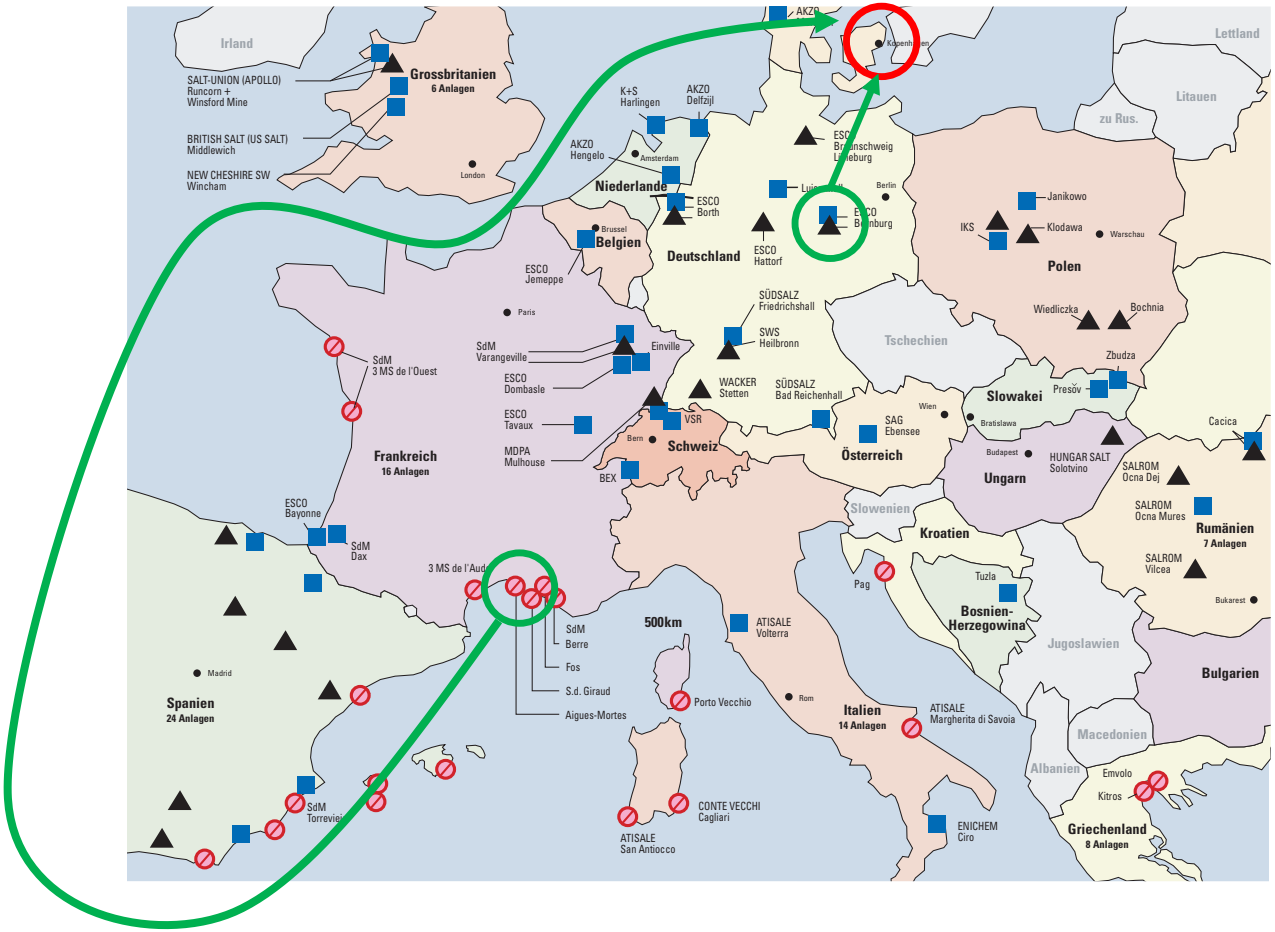
=> A re-thinking process started

Production processes and CO_{2eq} emissions

Rock salt	Sea salt (solar salt)	Vacuum salt
Traditional rock salt mining	Evaporation / crystallization of sea salt	Recrystallization of purified brine
		



Production sites in Europe



- Vacuum salt
- Rock salt
- Sea salt

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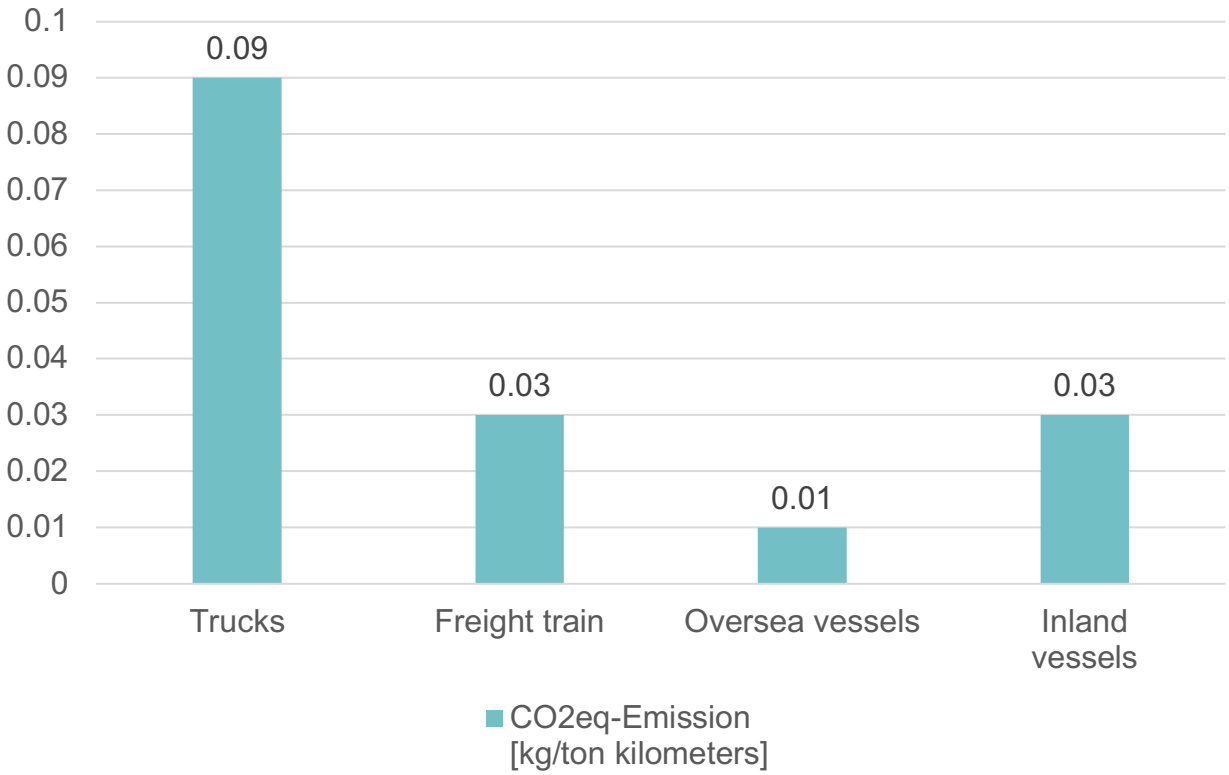
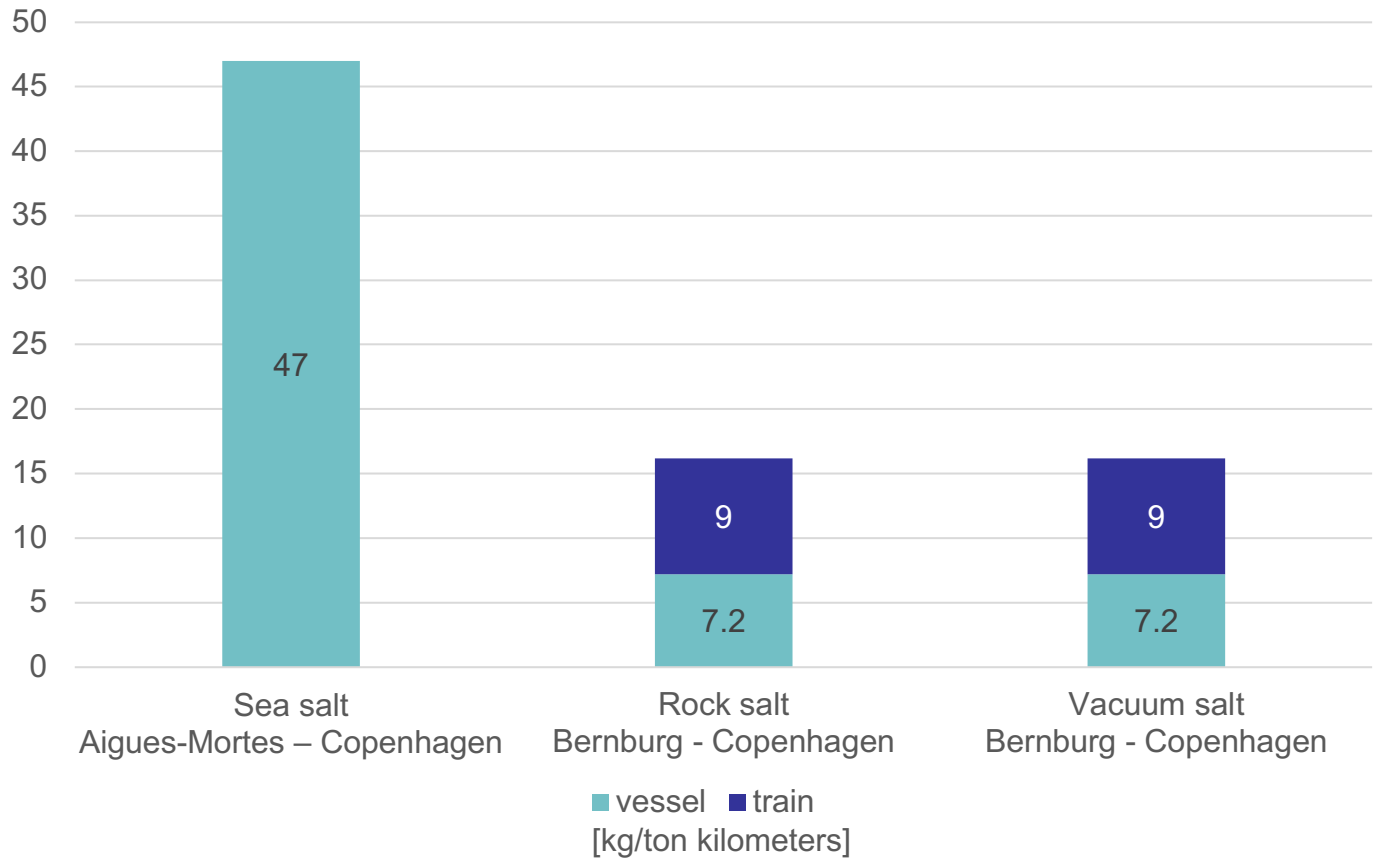
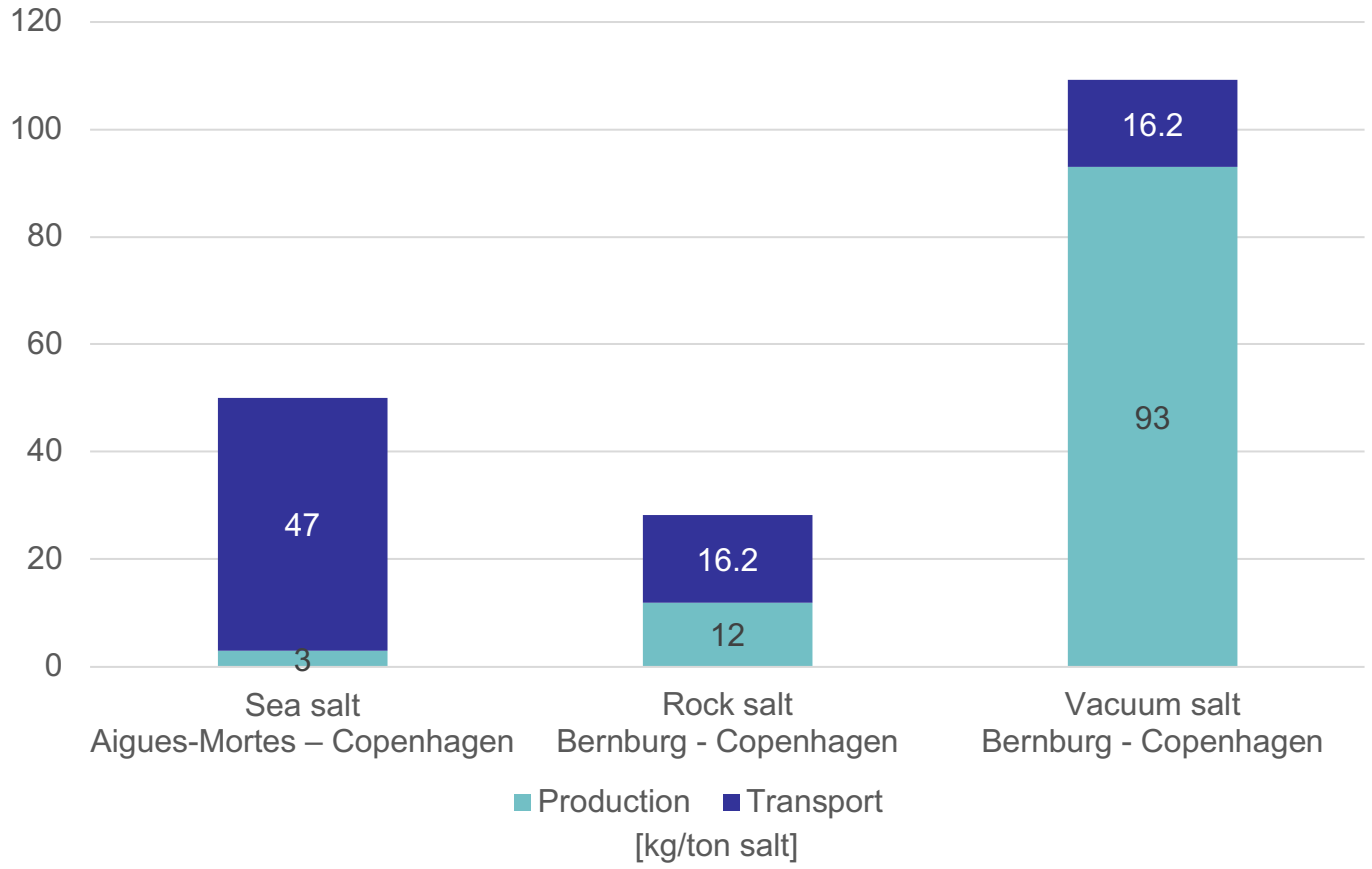
CO_2eq-emission of a transport vehicle



CO_{2eq}-emissions for each scenario and transport vehicle



Combined CO_{2eq}-emissions



Conclusion

- the farther away a customer is from a sea salt plant, the more environmentally unfriendly sea salt becomes
- from a holistic point of view, rock salt and sea salt can be seen as equivalent
- but it needs to be evaluated on a case-by-case basis and can´t be generalized

=> **it is always necessary to include all parameters**

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IT'S ALL ABOUT LIFE

Thank you for your attention

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Questions ?

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