



Shared Standardization – What is it all about?

[Agnar Gudmundsson \(Thomas Sender Mehl\)](#)

Overall Aim

Improve the competitiveness of the wind industry

21.09.17

Anders Vedel: Cooperation between industry and research community is a necessity to succeed

NYHED Hører til kategorierne: [Aktiviteter](#) [Branche](#) [Forskning og udvikling](#) [Marked](#)



Keynote speaker



Anders Vedel

CTO, Vestas Wind Systems

Anders Vedel: “Vestas is committed to taking the lead in industrializing the industry further. This includes encouraging suppliers to develop and deliver **modules rather than single components, a development seen in other mature industries.** Furthermore, we actively support the **standardization across the industry along with competitors** in order to reduce the cost base for the wind industry”.

Overall Aim

Collaborate with other Wind OEMs and key stakeholders to develop industry standards (Certification, Documentation, products/ materials, technologies, processes/ interfaces) within **selected non core areas to improve the wind's competitive position towards other energy sources**

Potentials

- ✓ Economy of scale in procurement
- ✓ Technology leap through partner innovation on components and also systems
- ✓ Quality improvement from the use of standard items and processes
- ✓ Improved availability of items
- ✓ Automatization of production and assembly processes
- ✓ Reduced time to market due to harmonized certification and test

Overall Aim

Collaboration across the industry – Possible players

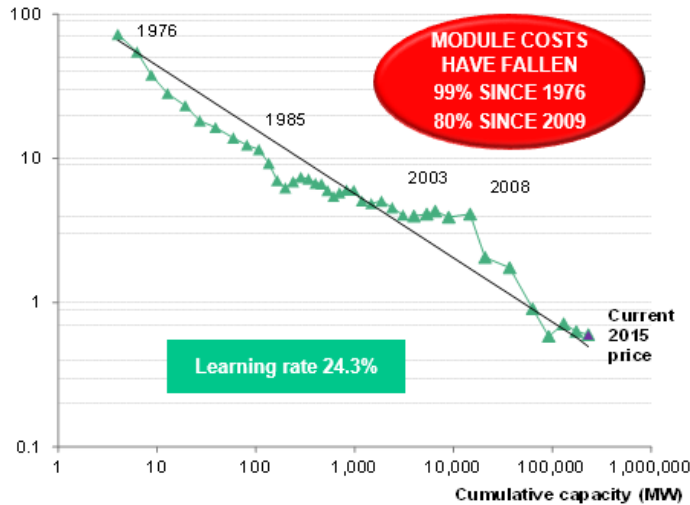


- Pre-competitive collaboration with other wind OEM, suppliers and other key players about commonalities at different levels
- Stimulated and funded by government incentives in EU, DK and DE
- The results: Open source solutions that contribute to reduced LCOE

Why is Shared Standardization Important

The wind industry is lacking behind in producing the cheapest green energy

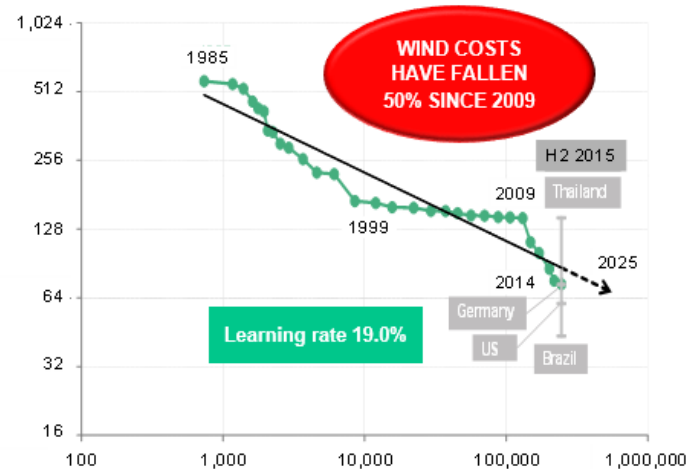
SOLAR PV MODULE COST (\$/W)



Note: Pricing data has been inflation corrected to 2014. We assume the debt ratio of 70%, cost of debt (bps to LIBOR) of 175, cost of equity of 8%

Source: Bloomberg New Energy Finance

ONSHORE WIND LEVELISED COST (\$/MWh)



Note: Prices are in real (2015) USD. 'Current price' is \$0.61/W

Source: Bloomberg New Energy Finance, [Maycock](#)

Wind and solar experience curves – The solar PV industry is costing out faster than the wind industry

What is Shared Standardization

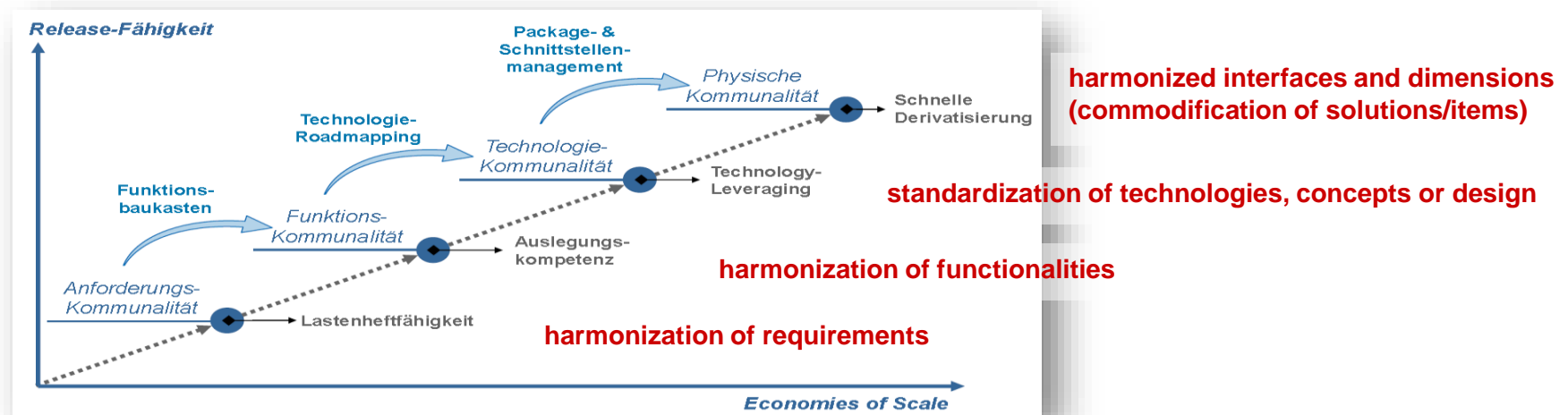
Standardization dimensions

Category characteristics for standardization approaches

An established standard, norm, or requirement in a particular area of business

Collins English Dictionary

Vestas Standard Supplier Standard Industry Standard Global Standard



What is Shared Standardization

Focus on Core Competences

APPLE

In an [interview with Charlie Rose](#), Apple CEO Tim Cook explained that one of the core principles Steve Jobs hammered home was for the company to stay focused on doing only what you it does best. "you could put any product we have today on this little table - and yet this year we'll ship \$180 billion of them". He goes on to say: "It's easy to add ... it's hard to stay focused," he said. "And so the hardest decisions *we* make are all the things *not* to work on."

So what would you say they focus on? My take (not in any particular order):

1. Leading edge technology
2. Quality - doing whatever they do, better
3. Ease of Design (the user experience)



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Questions & Answers