

WACKER POLYSILICON – Leading Value Supplier to The Global Photovoltaics Industry

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Our Business Portfolio – A Foundation for Growth

WACKER BIOSOLUTIONS

- ▶ High potential for future development

16%

*

WACKER POLYMERS

- ▶ No. 1 in dispersible polymer powders
- ▶ No. 1 in VAE dispersions
- ▶ Global footprint

19%

WACKER POLYSILICON

- ▶ No. 2
- ▶ Cost and quality leader
- ▶ Enabling industry growth

38%
(33%**)

13%

WACKER SILICONES

- ▶ No. 2 with global footprint
- ▶ Leading positions in key growth segments

14%

Siltronic

- ▶ Technology leader, ranking as no. 3
- ▶ Balanced base of customers
- ▶ Minority position floated (WAF300; WAF)

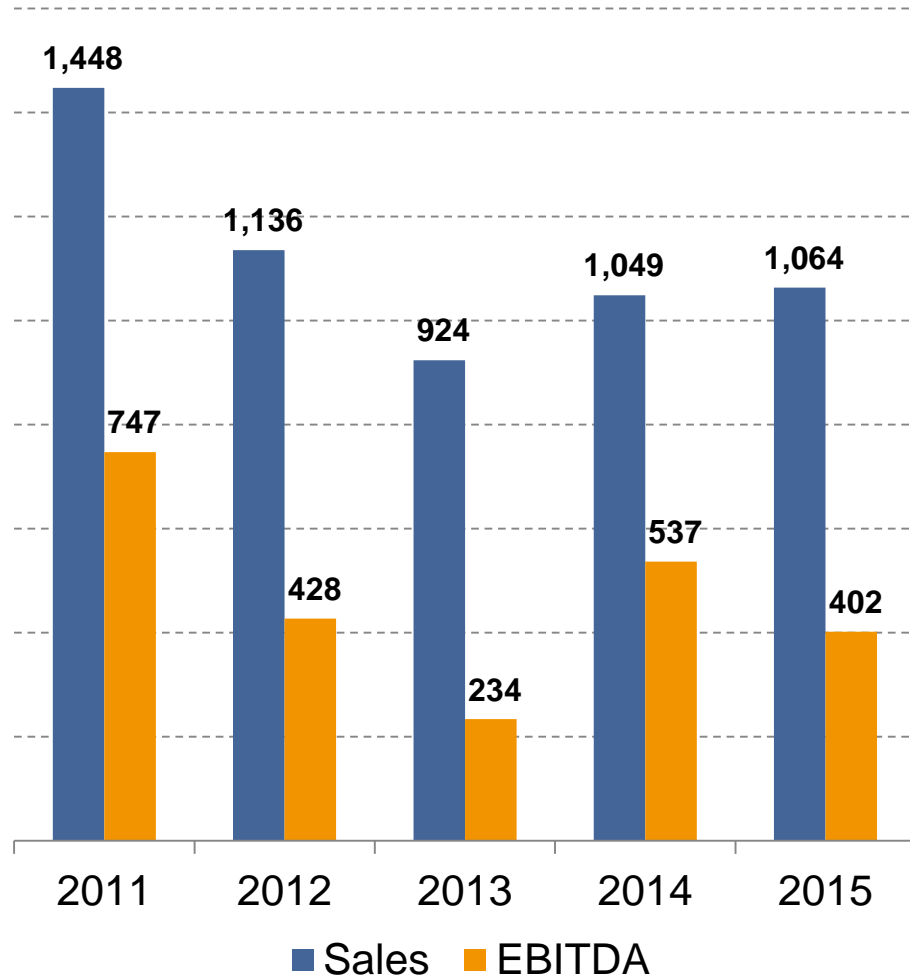
WACKER:
FY 2015
Sales €5.3bn
EBITDA Margin
20%

*Sales FY 2015, Others

** EBITDA Margin adjusted by non-operational effects

WACKER POLYSILICON: Industry Leader In a Strongly Growing Market

Financials WACKER Polysilicon (m€)

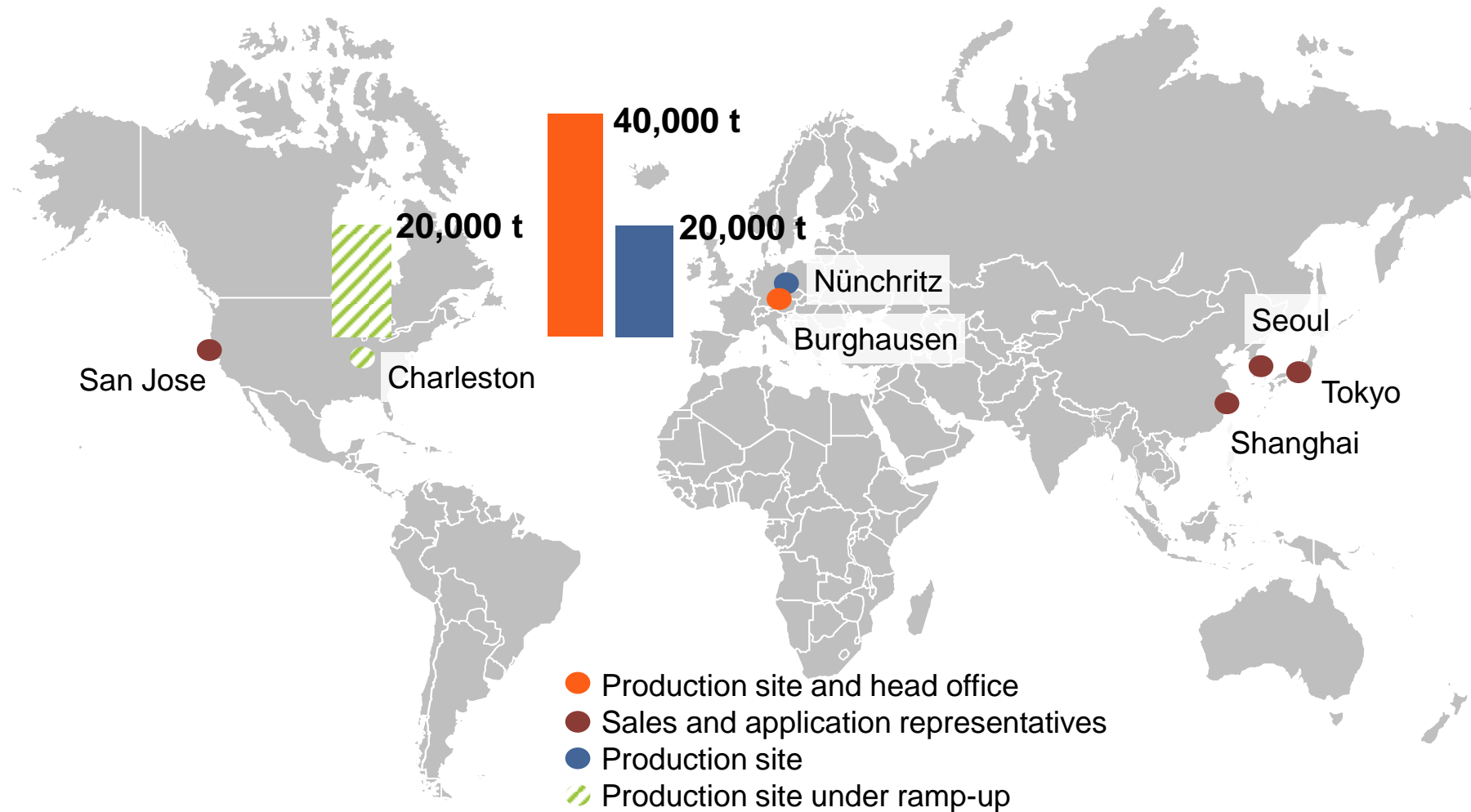


Main Facts WACKER Polysilicon

- ▶ Global N°2 polysilicon producer in 2015
- ▶ Production sites: Burghausen and Nünchritz (Germany) with > 2 bn€ investments since 2005
- ▶ Additional expansion platform in Tennessee (USA) with total invest of 2.5 bn\$. Ramp up in 2016.
- ▶ Employees: 2,429 (as of June 30, 2016)

WACKER POLYSILICON Is Represented Globally with 3 Production Sites and 5 Sales Offices

Office Locations, Sites and Nameplate Capacities*



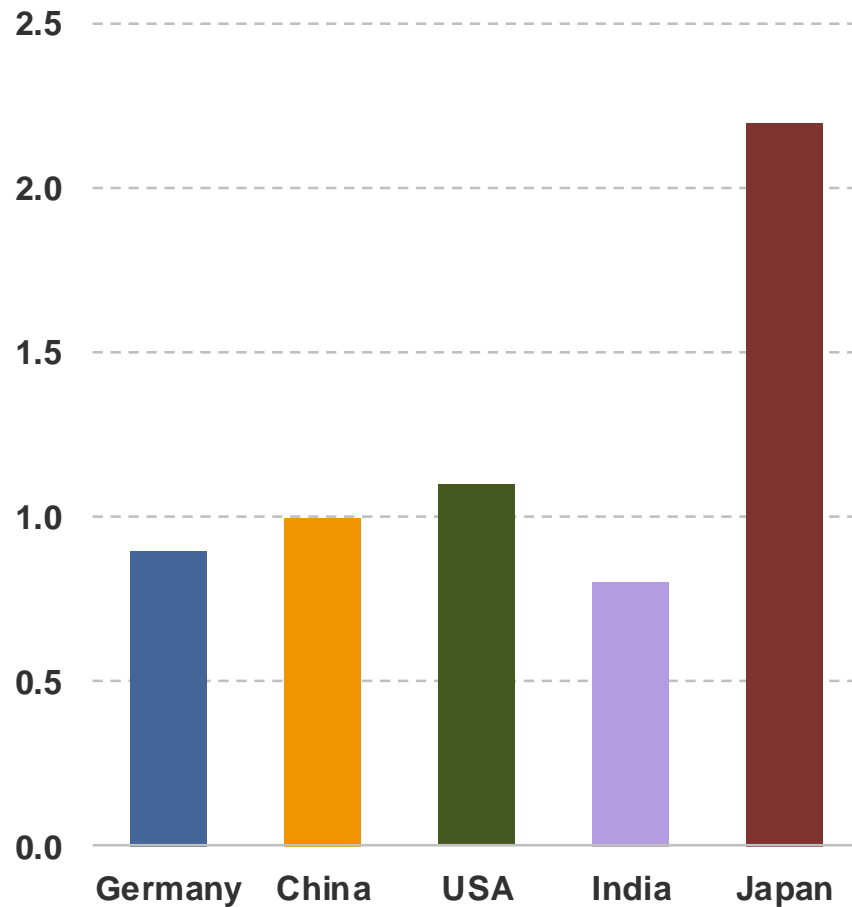
* in metric tons per year

Levelized Cost of Electricity Will Decline Further – System Price of 0.5 €/W Will Be Achieved over the Next 4-6 Years

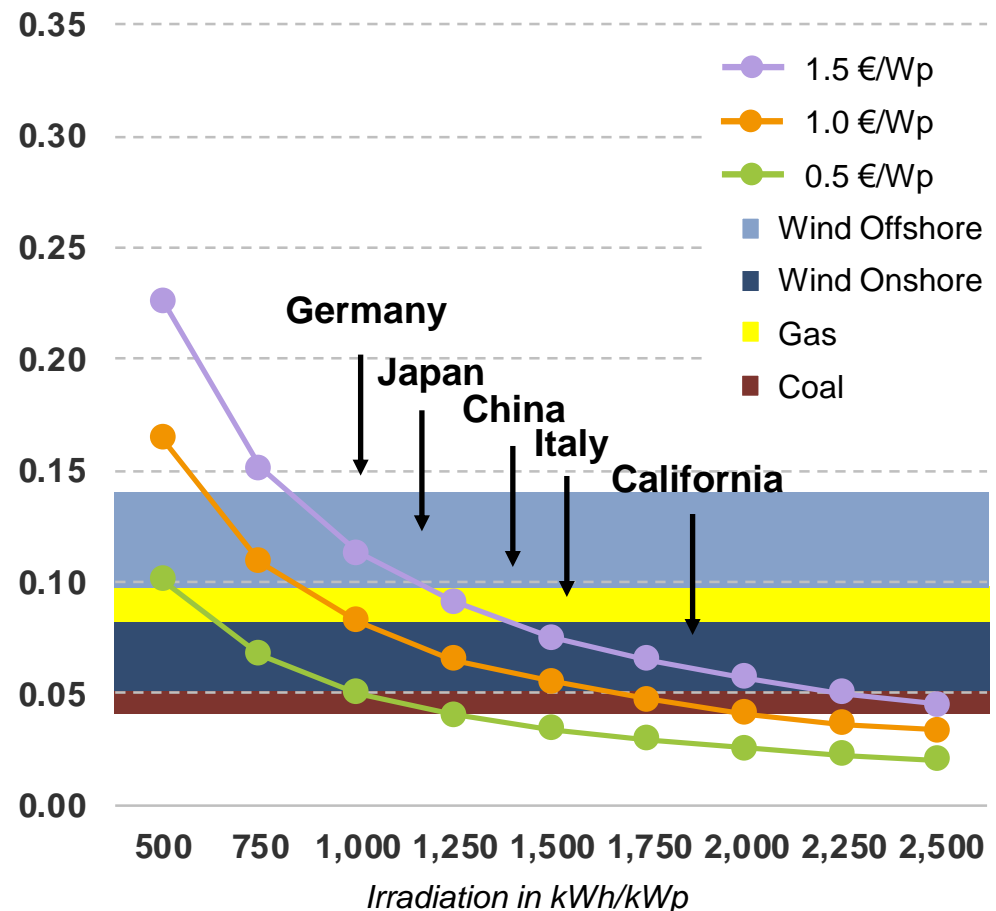
Benchmark PV System Prices* (€/Wp) and LCOE** (€/kWh, 30 Year Lifetime)

*ground-mounted PV systems (utility scale)

**levelized cost of electricity

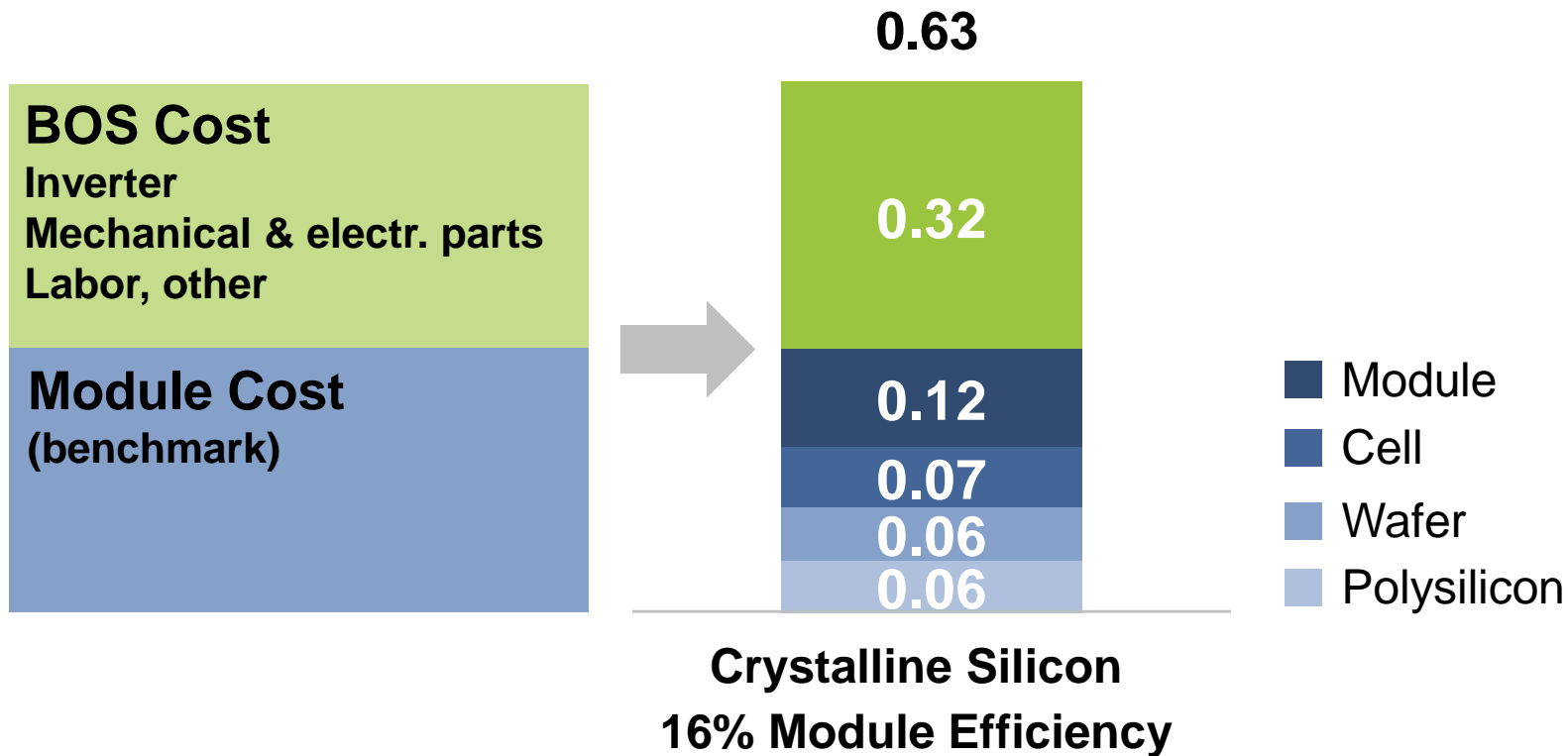


Sources: market surveys, industry announcements, WACKER estimates



Crystalline PV System Costs of 0.63 €/W Are Reality

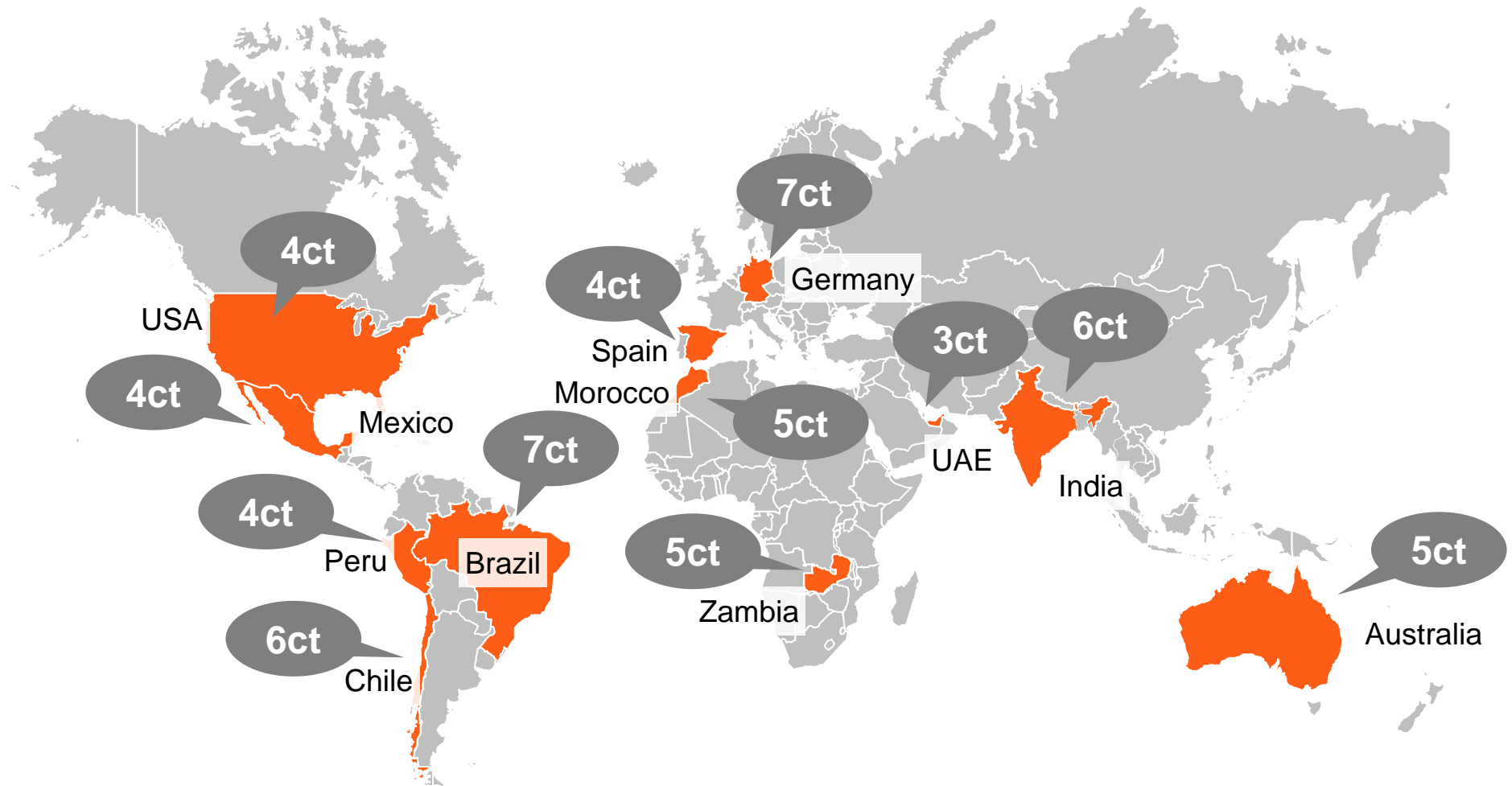
Benchmark Ground-Mounted PV System Cost Structure (€/Wp, Q1 2016)



Source: WACKER analysis

Power Rates Down to 0.03 €/kWh in Sunny Regions

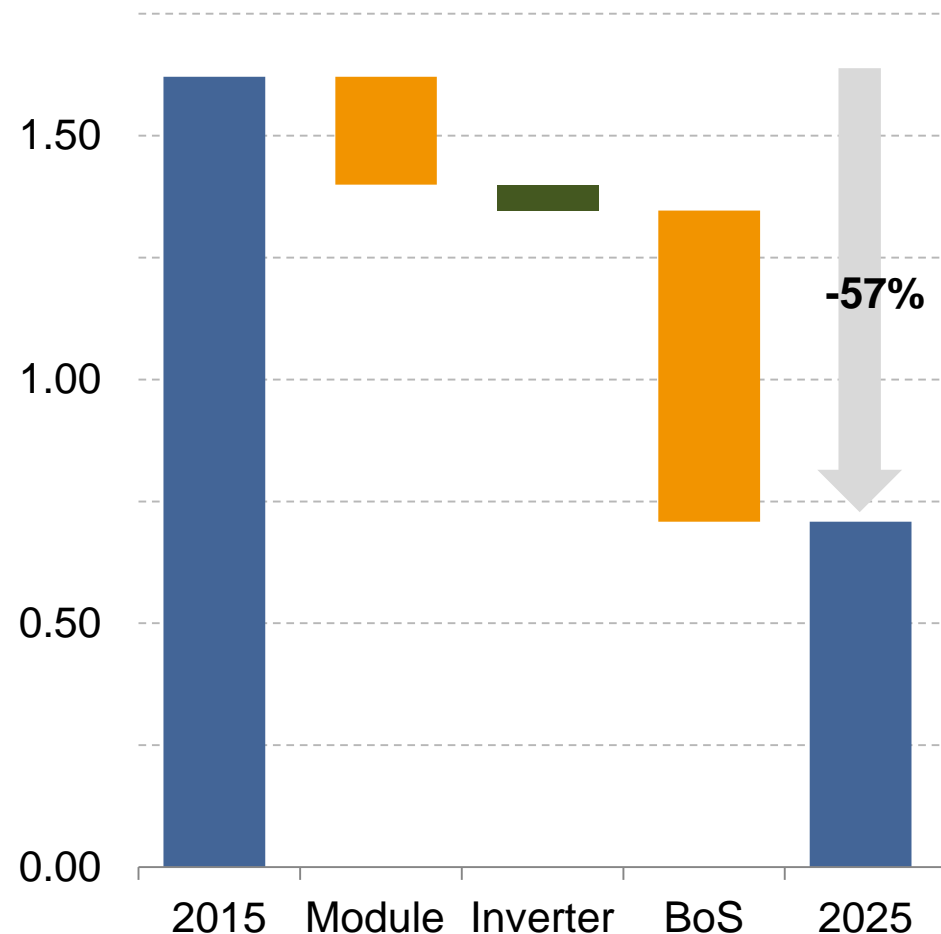
Benchmark PV Power Rates in €/KWh



Source: SeeNews Renewables, Industry Announcements

The Already Competitive PV Power Rates May be Halved Further in The Next Decade. PV Power With Potential to Become Main Stream

Global Weighted Average Installed Costs of Utility PV Systems (€/W)*



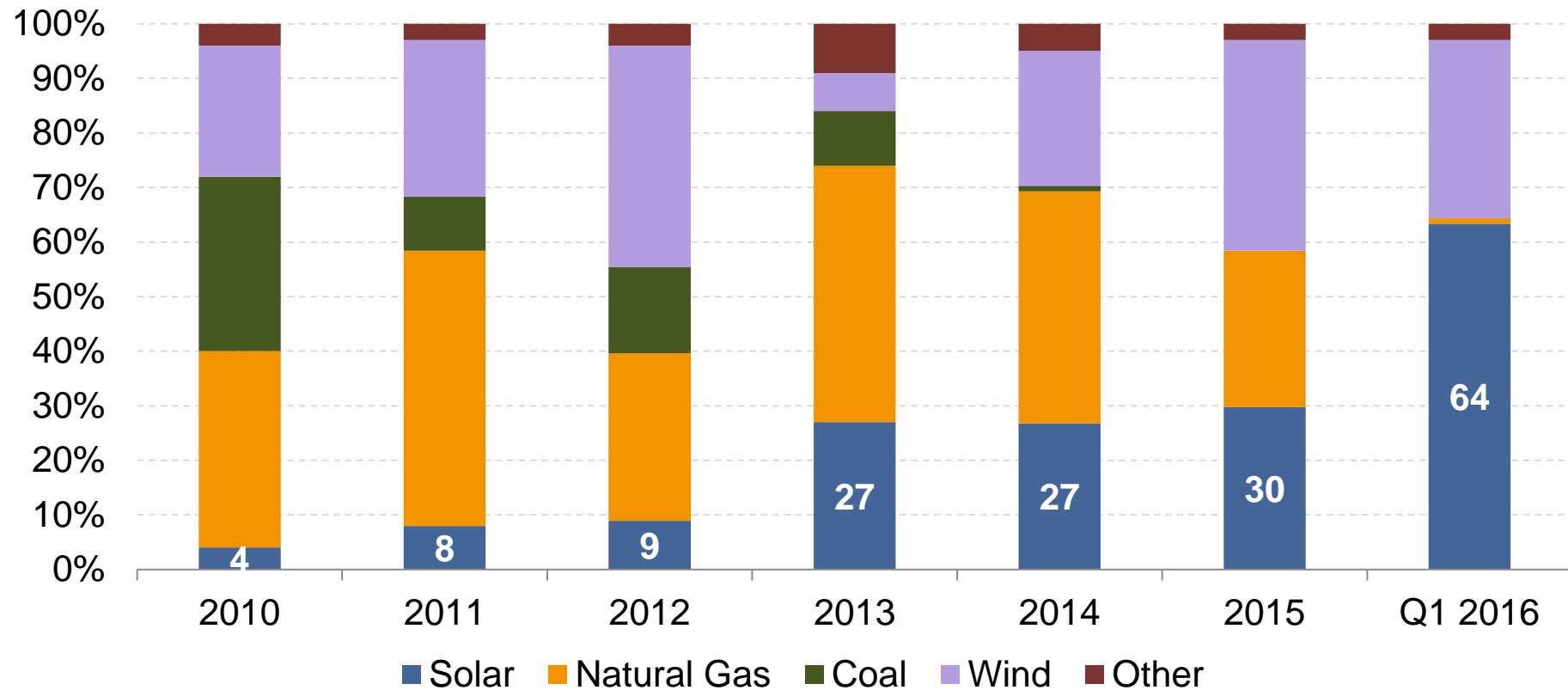
Key Trends

- ▶ Despite significantly reduced module prices < 0.5 €/W today, future cost reductions for PV will still come from further module cost reductions.
- ▶ The bulk of the global average cost total PV system cost reduction opportunities in the next decade will derive from BoS (Balance of System), e.g. installation, EPC, leverage of efficiency gains.
- ▶ PV could even become cheaper than coal in China in 2030

*Source: IRENA 2016, The Power To Changes: Solar and Wind Cost Reduction Potential To 2025

Solar Power Has Become The Main Source For New Electricity Generation Capacity in the U.S.

Share of New U.S. Electricity Generating Capacity Additions



► There are already > 1 million operating solar PV installations in the US

Source: GTM Research (solar), FERC (all other technologies)

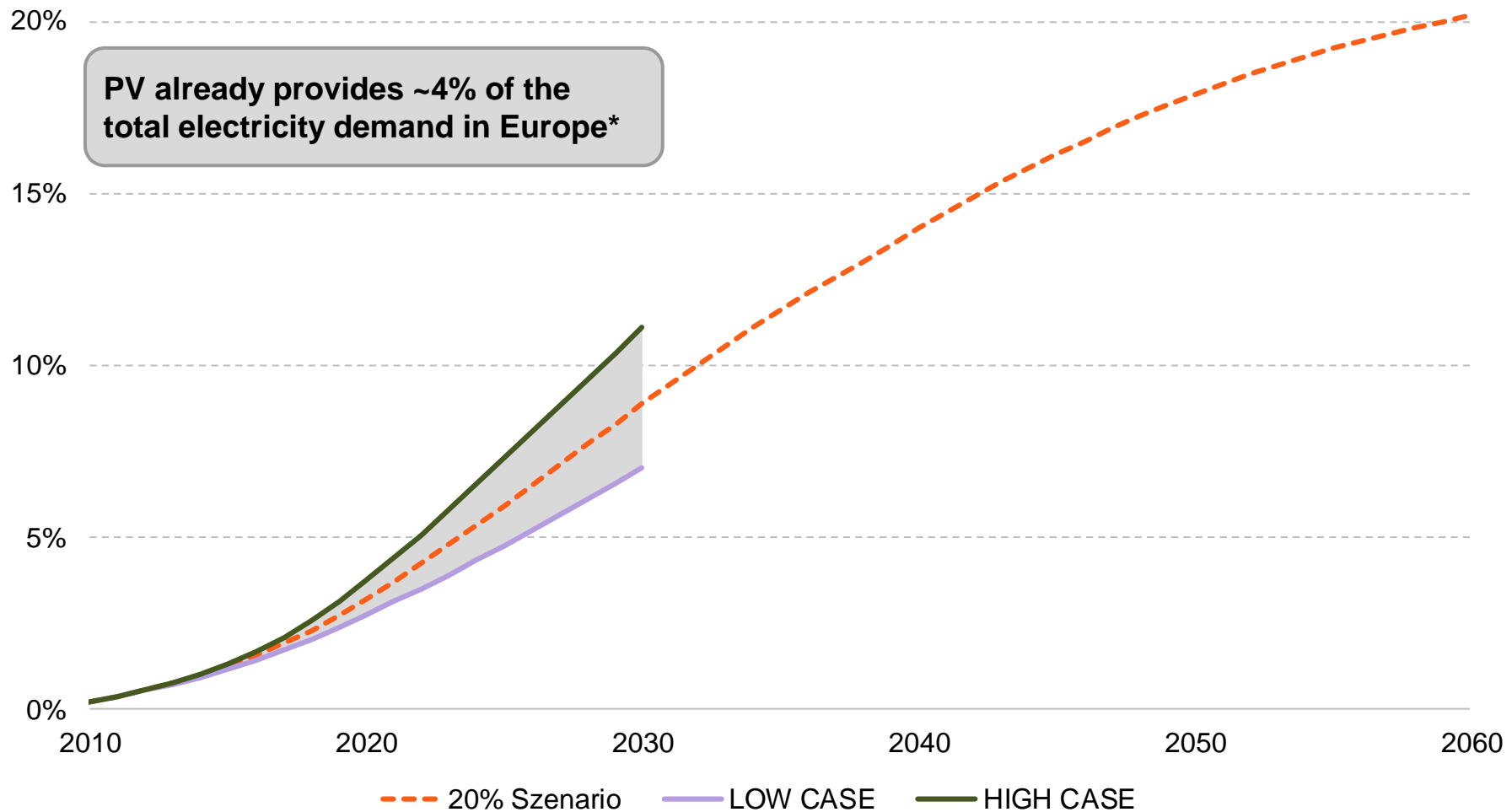
POLYSILICON: Global Installations Further Broaden And Grow

Country	2013	2014	2015	2016e	2017e
France	0.6	0.9	0.9	0.9 – 1.1	1.3 – 1.5
Germany	3.3	1.9	1.5	1.0 – 1.2	1.2 – 1.4
Italy	1.1	0.6	0.3	0.4 – 0.5	0.4 – 0.5
Europe other	5.8	4.0	5.9	4.5 – 5.0	4.6 – 5.6
Europe total	10.8	7.4	8.6	6.8 – 7.8	7.5 – 9.0
Australia	0.9	1.0	0.9	0.9 – 1.1	1.0 – 1.2
China	12.9	13.2*	16.5*	18.0 – 22.0	16.0 – 23.0
India	1.0	1.0	2.1	4.5 – 5.0	8.0 – 9.0
Japan	6.8	9.3	10.8	8.0 – 8.5	8.0 – 9.0
USA	4.8	6.2	7.3	11.0 – 13.5	10.0 – 13.0
Rest of World	2.8	6.0	10.0	11.0 – 12.5	14.0 – 16.0
Total	40 GW	44 GW	~56 GW	~60 – 70 GW	~65 – 80 GW

Sources: SPE, IHS, Industry announcements, WACKER estimates; *2.6 GW allocated from 2015 to 2014, ~4 GW from 2016 to 2015 (installed and not connected capacity)

PV Will Be a Leading Source of Electricity

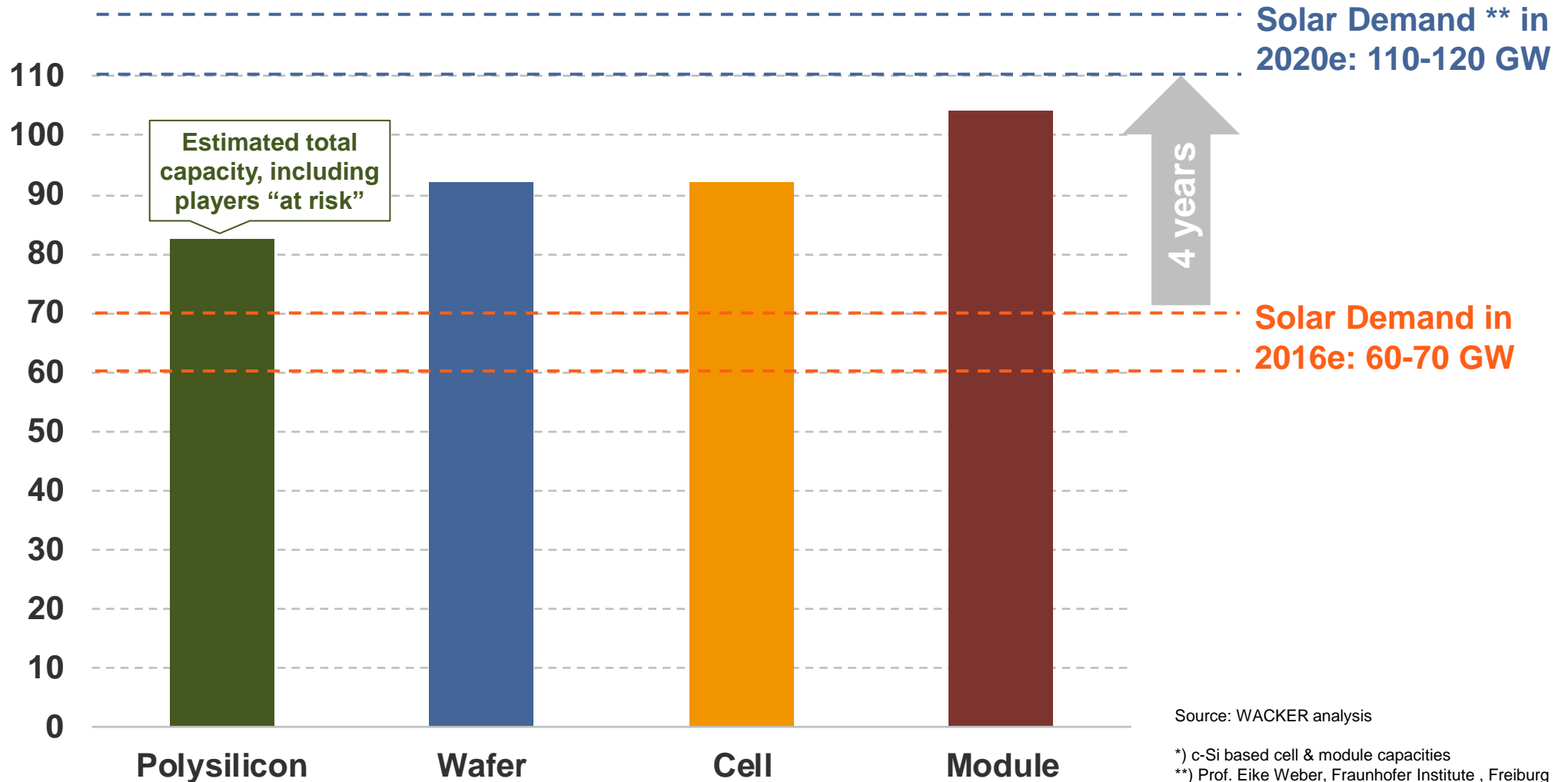
PV Share of Global Electricity Demand (%)



Sources: WACKER analysis; *Solar Power Europe 2016

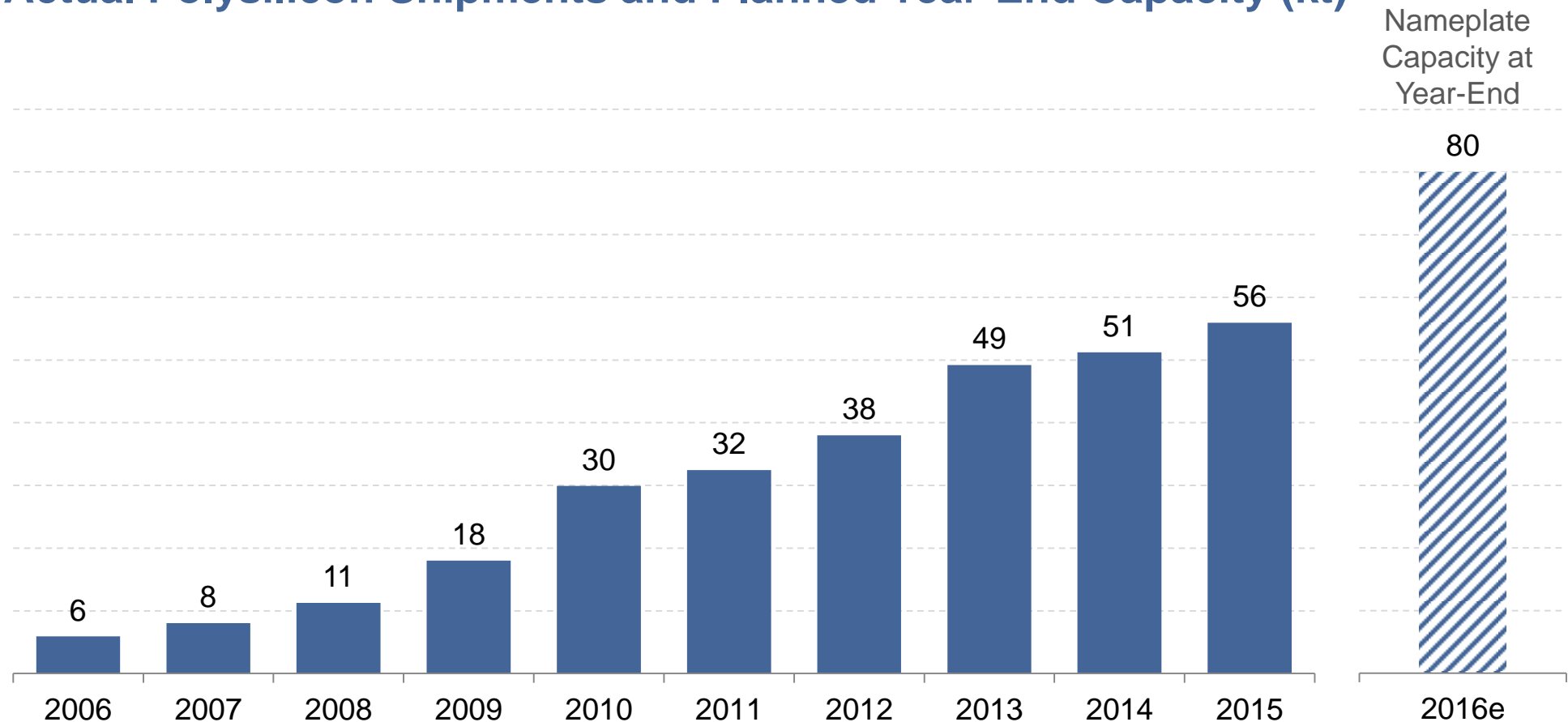
Growing Capacities Are Today Excessive But Are Needed to Fulfill Growing Demand

Global Solar Value Chain Capacities versus Demand (GW, 2016e)*



Growing With The Market – Tennessee Ramp on Track

Actual Polysilicon Shipments and Planned Year-End Capacity (kt)



▶ The ramp of Poly 11 plant in Tennessee has been started in January 2016 and is fully on track.

WACKER Has Built a World-Class Polysilicon Manufacturing Site in Charleston, Tennessee

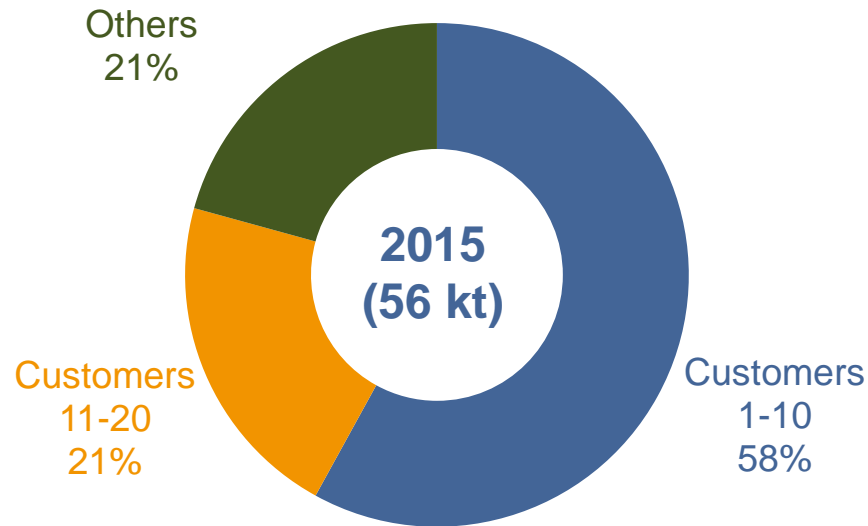


Project Statistics

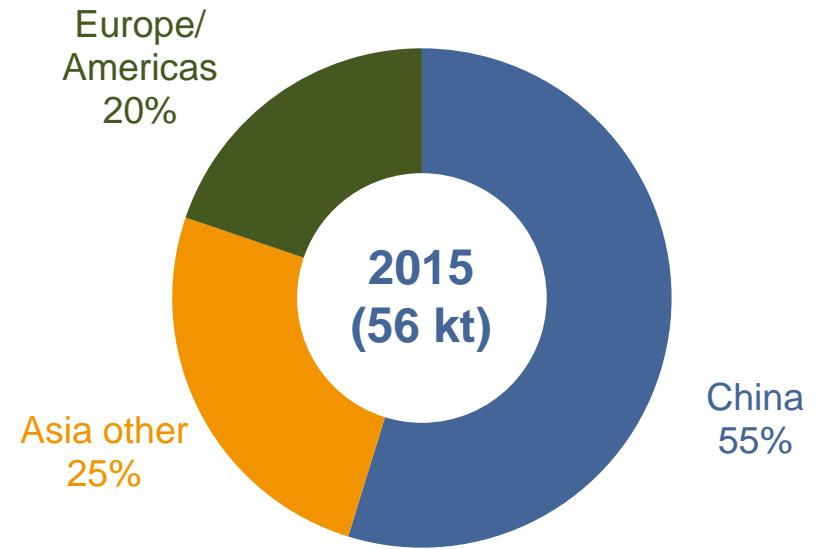
- ▶ 20 kt polysilicon solar grade
- ▶ \$2.5 billion investment
- ▶ 650 jobs once fully operational
- ▶ 30+ buildings
- ▶ 3.8 million cubic yards soil moved
- ▶ 40,000 tons steel
- ▶ 980,000 feet of pipes
- ▶ 3,500+ workers in peak
- ▶ Production start beginning 2016

Well Balanced Customer Structure With Focus on Asian Growth Regions

Volumes Shipped by Customer

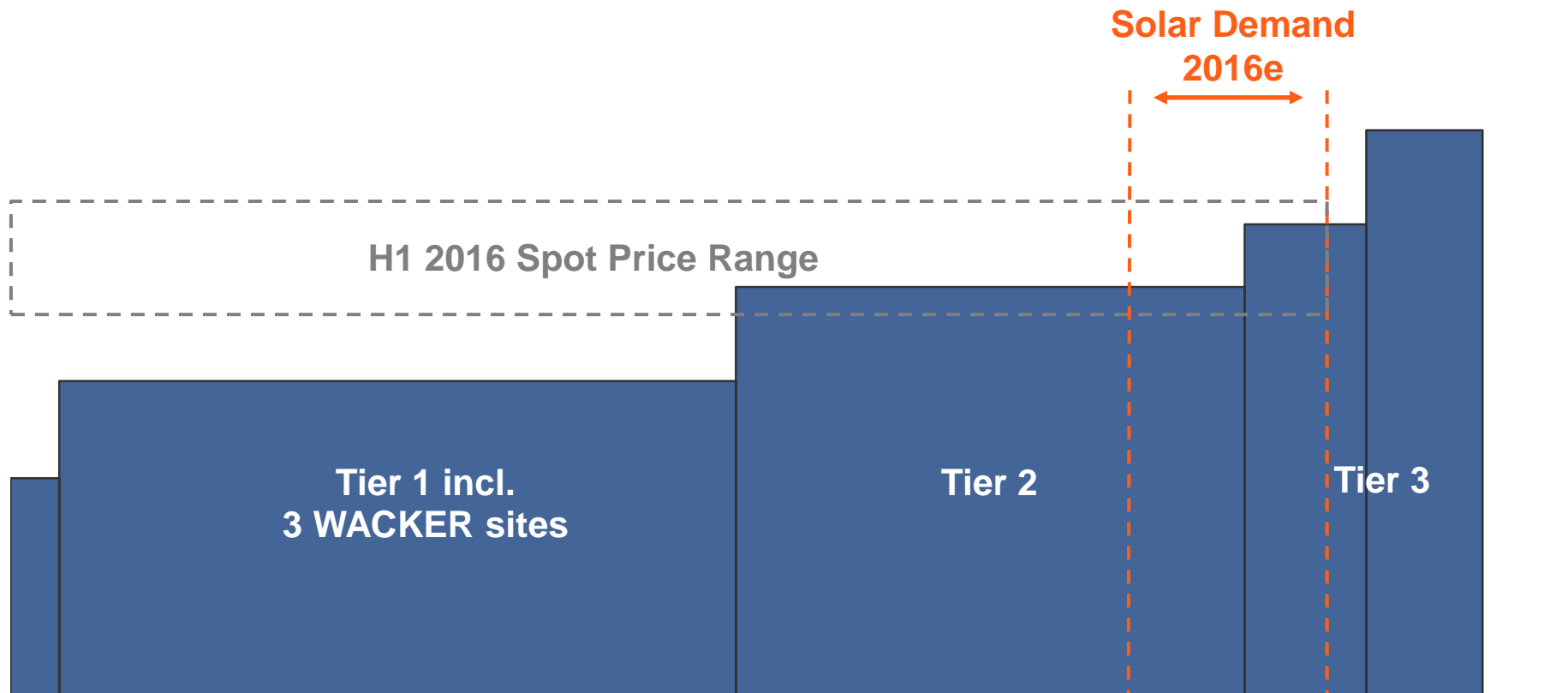


Volumes Shipped by Region



WACKER With All Three Production Sites On The Left Side Of the Polysilicon Industry Cash Cost Curve

Industry Cash Cost Segmentation for Solar Grade Polysilicon 2016e (EUR/kg)

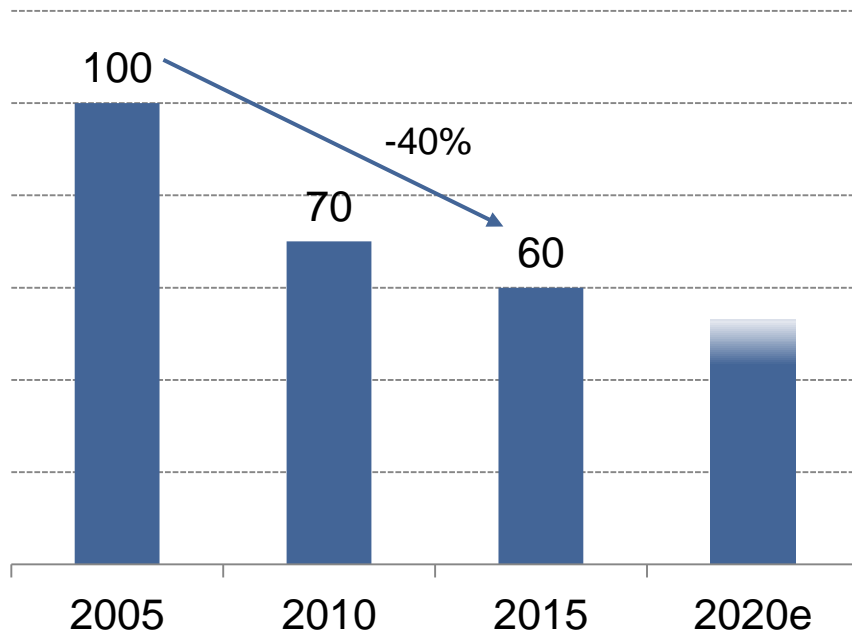


Source: Industry announcements, WACKER estimates

Strong Focus on Cost And Productivity

Specific Energy Consumption*

Index = 100

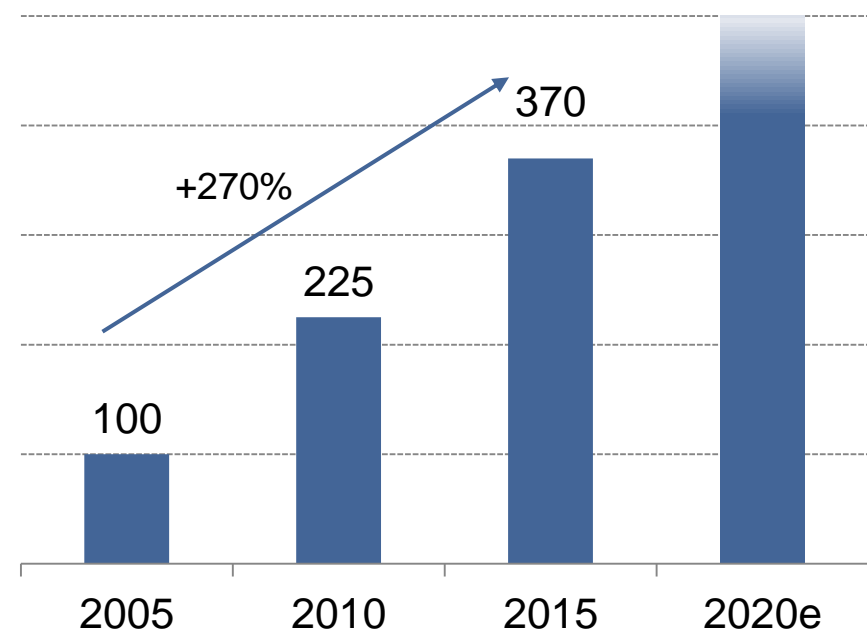


- ▶ New deposition reactors
- ▶ New conversion reactors
- ▶ New process design

* Solar polysilicon process only

Labor Productivity*

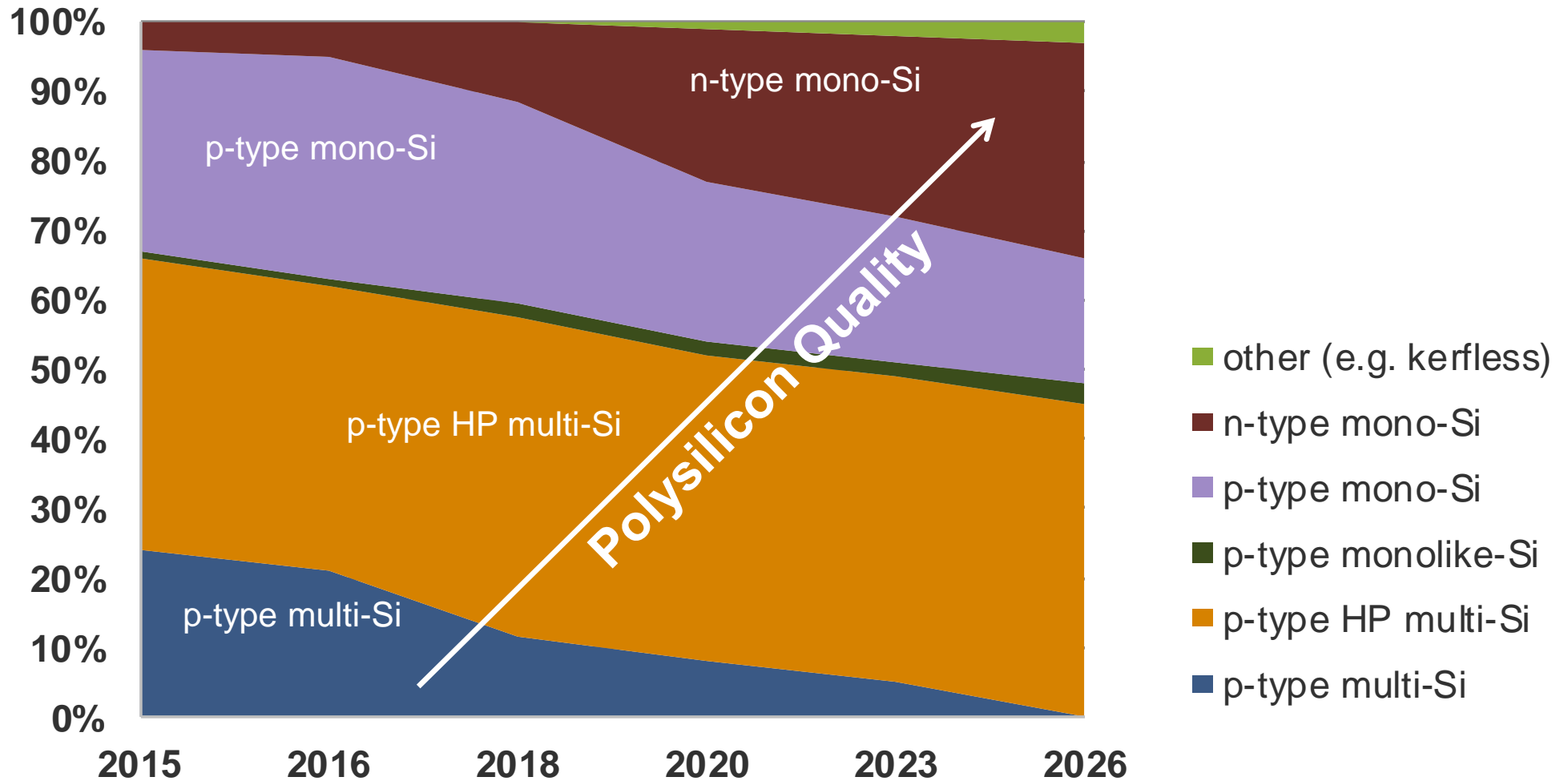
Index = 100



- ▶ Economies of scale
- ▶ Yield improvements
- ▶ Automation

* Total average for all sites, direct labor including analytics

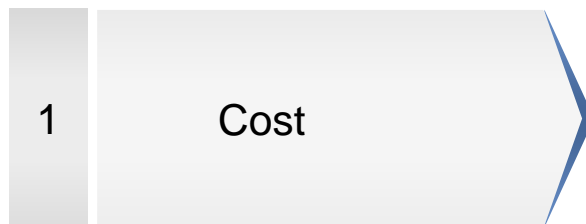
High Quality Polysilicon Required For High Cell Efficiency Trend



Source: ITRPV = International Technology Roadmap for PV Initiative of Semi, www.itrpv.net
HP = High Performance

WACKER POLYSILICON: Maintain Leadership in Cost And Quality

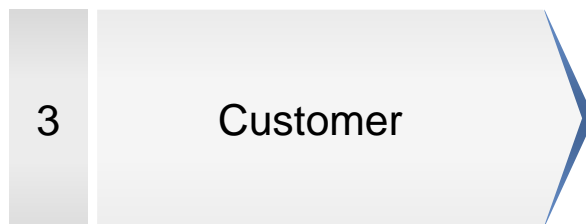
Our Roadmap 2017



- ▶ Competitive pressure drives module cost and conversion efficiency
- ▶ Multi-year cost reduction roadmap implemented to maintain WACKER's leading cost position



- ▶ C-Si-PV moving towards efficiencies above 22% (module)
- ▶ Pricing differentiates between polysilicon qualities



- ▶ Develop products for all crystallization technologies in close cooperation with our customers
- ▶ Keep broad customer portfolio to react flexibly on market changes
- ▶ Expand capacities according to market demand

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