

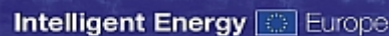
RES-e Regions WP4 Benchmarking of technologies: Photovoltaic Installations

Please observe, that all prices shown include VAT 25 %

Technology	PV, roofintegrated						
REMARK: All installations presented above are roofintegrated PV-systems. Because the total number of building integrated PV-systems in Denmark is small, it has been necessary to include installations located also in other regions than the Greater Copenhagen. That's also the reason that there is no distinction between installations smaller/larger than 10 kW. Place of installation is address (city).							
Installation No.	1	2	3	4	5	6	7
Country	Dk	Dk	Dk	Dk	Dk	Dk	Dk
Place of installation	Tøjhushaven 5 (Randers)	Dronningegade 10 (Randers)	Beboerhuset Remisen (Randers)	Gasværksvej 8 (Copenhagen)	Gasværksvej 12 (Copenhagen)	Trekanten (Copenhagen)	Energi- og vandværksted (Copenhagen)
Size (kWp)	5,5	11,6	12,2	7,2	8,1	18,5	2,0
Size (m2)	62,0	130,0	122,5	76,0	65,0	151,0	40,5
Type	Poly-Si	Poly-Si	Poly-Si	Mono-Si	Mono-Si	Mono-Si	Poly-Si
No. PV panels * Nom.panel-power	18 * 120Wp + 24 * 94Wp + 16 * 67Wp	152 * 77Wp	200 * 61Wp	60 * 120Wp			
Total investment, €	44832	75034	118926	80537	89933	134228	35302
Annual output-electricity (kWh)	4538	8135	10065	5346	6683	12210	1485
indicator 1 - €/kWp	8151	6468	9748	11186	11103	7256	17651
indicator 2 - €/m2	723	577	971	1060	1384	889	872

Technology	PV, add-on installation on single-houses (SOL1000-rooftop programme)						
REMARK: Almost every add-on installation on single-houses is a result of a national rooftop programme with investment subsidy. The most recent programme was a 1000 roof-top programme with a 40 % subsidy. The programme was carried out by an electric utility, EnergiMidt. By large scale purchase of modules and inverters they managed to reach remarkable low prices. Three standard systems at fixed prices were offered to the customers. Standard systems no. 1 and 2 are turnkey including everything. Standard system no. 3 is do-it-yourself installation of hardware and additional costs for the (mandatory) electrician to connect to the grid; the price given below includes costs for the electrician.							
Standard system no.	1	2	3				
Country	Dk	Dk	Dk				
Size (kWp)	2,10	1,05	0,25				
Size (m2)	21,0	10,5	2,5				
Type	Poly-Si	Poly-Si	Poly-Si				
No. PV panels * Nom.panel-power	20 * 105Wp	10 * 105Wp	2 * 125Wp				
Total investment, €	11900	6417	1656				
Annual output-electricity (kWh)	1733	736	200				
indicator 1 - €/kWp	5667	6111	6624				
indicator 2 - €/m2	567	611	652				

Udført med støtte fra:



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