

Variable	CA	DK	Comments
Alpha value for learning by doing on capacity factor	1.07	1.07	Capacity factor learning did not show significant changes between CA and DK, therefore in the model, this variable is treated as a global value with the same values.
Alpha value for learning by doing on investment cost	0.88	0.947	When we look at the investment cost at 1980 and investment cost at 1995, we see that CA had much impressive learning curve compared to DK. To capture this effect in the model, alpha and beta values of CA is given higher than DK. Also, as Hekkert et. al mentions, learning by doing is hugely affected from entrepreneurial activities (2007). In Denmark the entrepreneurs were producing agricultural equipment before, therefore they learned slowly with trial and error (Karnoe & Garud, 2001)
Beta value for learning by searching on capacity factor	1.04	1.04	Since capacity factor is treated as a global value, this learning effect is also the same. The reason it is lower than alpha value is based on literature (Kamp, 2002).
Beta value for learning by searching on cost	0.9	0.96	The reason to have lower value for CA which results in better cost reduction is due to available data. Note that these beta values are also less effective compared to alpha values which is based on literature (Kamp, 2002)
Effectiveness of contacts of nonusers	0.3825	0.45	Since the communication among potential adopters in DK was higher than CA due to published Naturlig Energi magazine where the performances of wind turbines made public (Kamp, 2004). For this reason, the effectiveness of contacts of non-users are assumed to be 15% less in CA.
Effectiveness of contacts of users	0.68	0.8	Communication between the users of wind turbines were also higher in DK due to Wind Meetings where knowledge and experience were shared between manufacturers, owners and researchers. They also established Danish Windmill Owners Association (Kamp, 2004). For this reason, the effectiveness of contacts of users are assumed to be 15% less in CA.
Initial familiarity	0.25	0.25	Initial familiarity with the wind turbines were low but not zero for both cases. Both CA and DK had historical experiences with wind turbines (see Chapter 3 and 4) and they were familiar with the windmills. There were no real indication of familiarity difference between two cases in the literature, therefore they are assumed to be the same.
Initial installed capacity for electricity generation	55000	7072	This number is based on EIA data, reflecting the real values.
Initial investment cost of wind turbines per kW	2500	1322	This data is taken from the literature and converted to 1980's dollar value. (Sawin, 2001; Lantz et al 2012).
Interest rate	0.6588 (mean)	0.7757 (mean)	The interest rates are also taken from the literature (Sawin, 2001).
	0.0265	0.0172	

	(stdev)	(stdev)	
Maximum decay rate	0.425	0.425	Maximum decay rate for both cases are assumed to be same, because this value represents the reference value for forgetting rate. Due to differences in cultures this number could differ, but in general, people tend to forget the new technology when the exposure is not frequent enough (Struben & Sterman, 2008). Since this situation is valid both for CA and DK the same value is used in the simulation.
Normal social exposure	0.2	0.2	Similar to maximum decay rate, this value represents the reference value for forgetting rate. When it is 0.2 it means that familiarity decays with the half of the maximum decay rate. Since maximum decay rate is assumed to be the same for both cases, it is reasonable to take the same reference value for normal social exposure, ensuring the decay behaves the same for both cases.
Operation cost of wind turbines	14.19 (mean) 3.53 (stdev)	12.73 (mean) 3.391 (stdev)	These costs change over time, therefore their mean and standard deviation is given in the table.
Percentage increase of installed electricity capacity per year	2.5%	2.5%	This values are also calculated on average, by looking at the net changes of installed capacity between 1980 and 1995 (EIA, 2012). The average capacity increase per year for both cases turned out to be the same
Sensitivity value for wind turbines	1	1.8	The reason for taking Danish utilities' sensitivity values higher than California is due to market's results. When weighed average cost of conventional methods and LCOE of wind is examined, it is observed that standard deviation of the prices is much higher in Denmark compared to California. This situation implies an insecure market structure with more sensitive buyers to price. The numbers are calibrated with the fit to historical data. For both values DK values are 1.8 times higher than CA.
Sensitivity value for conventional technologies	0.54	1	
Weighted average cost of conventional methods (Average LCOE)	24.87 (mean) 2.607 (stdev)	61.61 (mean) 11.63 (stdev)	These values are based on historical data. Since the value changes over time the mean and the standard deviation is given in the table. As it can be seen, the prices are more stable in California.
LCOE of wind	31.75 6.95	56.83 19,68	These values are calculated by the model, but to show the changes in the price over time it is added to the table.