

Generate Calculation Support Sheet



\$0 carbon Tax

Generator	Capital Cost	Operating Cost (1 year)	CO ₂ Emissions (metric Tons of CO ₂ equivalent per year)	CO ₂ Cost (carbon Tax) (\$/mT)	Operating Cost (30 yrs) [=30*1-yr OpCost]	Emissions Cost (30yrs) [=30*CO ₂ emissions/yr* carbon Tax]	Capital + Operating + CO ₂ Emissions Cost (30 yrs)	# of Grid Rectangles for Generator Game Piece	Relative Cost for Generator per Grid Rectangle
Coal - Existing	\$0	\$20	4.5	\$0	\$600	\$0	\$600	32	\$19
Natural Gas	\$105	\$10	1.2	\$0	\$300	\$0	\$405	16	\$25
Wind (Small)	\$75	\$1	0	\$0	\$30	\$0	\$105	4	\$26
Wind - Large	\$300	\$4	0	\$0	\$120	\$0	\$420	16	\$26
Wind - Large with Battery	\$375	\$4	0	\$0	\$120	\$0	\$495	16	\$31
Solar - Large	\$450	\$3	0	\$0	\$90	\$0	\$540	16	\$34
Solar (Small)	\$110	\$1	0	\$0	\$30	\$0	\$140	4	\$35
Solar - with Battery	\$560	\$3	0	\$0	\$90	\$0	\$650	16	\$41
Coal	\$785	\$20	4.5	\$0	\$600	\$0	\$1,385	32	\$43
Nuclear	\$2,125	\$25	0	\$0	\$750	\$0	\$2,875	64	\$45
Coal - CCS	\$1,170	\$25	0.5	\$0	\$750	\$0	\$1,920	32	\$60
Not Used until Round 4 of Generate Game:									
EE - (Energy Efficiency)	\$20	\$0	0	\$0	\$0	\$0	\$20	4	\$5
Energy Efficiency - Large	\$80	\$0	0	\$0	\$0	\$0	\$80	16	\$5

Generate Calculation Support Sheet



\$10 Carbon Tax

Generator	Capital Cost	Operating Cost (1 year)	CO ₂ Emissions (metric Tons of CO ₂ equivalent per year)	CO ₂ Cost (carbon Tax) (\$/mT)	Operating Cost (30 yrs) [=30*1-yr OpCost]	Emissions Cost (30yrs) [=30*CO ₂ emissions/yr* carbon Tax]	Capital + Operating + CO ₂ Emissions Cost (30 yrs)	# of Grid Rectangles for Generator Game Piece	Relative Cost for Generator per Grid Rectangle
Wind (Small)	\$75	\$1	0	\$10	\$30	\$0	\$105	4	\$26
Wind - Large	\$300	\$4	0	\$10	\$120	\$0	\$420	16	\$26
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Solar - Large	\$450	\$3	0	\$10	\$90	\$0	\$540	16	\$34
Solar (Small)	\$110	\$1	0	\$10	\$30	\$0	\$140	4	\$35
Solar - with Battery	\$560	\$3	0	\$10	\$90	\$0	\$650	16	\$41
Nuclear	\$2,125	\$25	0	\$10	\$750	\$0	\$2,875	64	\$45
Natural Gas	\$105	\$10	1.2	\$10	\$300	\$360	\$765	16	\$48
Coal - Existing	\$0	\$20	4.5	\$10	\$600	\$1,350	\$1,950	32	\$61
Coal - CCS	\$1,170	\$25	0.5	\$10	\$750	\$150	\$2,070	32	\$65
Coal	\$785	\$20	4.5	\$10	\$600	\$1,350	\$2,735	32	\$85
Not Used until Round 4 of Generate Game:									
EE - (Energy Efficiency)	\$20	\$0	0	\$0	\$0	\$0	\$20	4	\$5
Energy Efficiency - Large	\$80	\$0	0	\$0	\$0	\$0	\$80	16	\$5