Renewable Energy Generation by Fuel, Reliability First Corporation / East, Reference case

Capacity, Generation, and Consumption	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Growth Rate (2011-2040)
Electric Power Sector 1/																																
Generating Capacity (gigawatts)																																
Conventional Hydropower	1.249	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	0.00%
Geothermal 2/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Municipal Waste 3/	0.660204	0.663404	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.669104	0.00%
Wood and Other Biomass	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.00%
Solar Thermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Solar Photovoltaic 4/	0.0376	0.1813	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.2249	0.70%
Wind	0.7406	0.7818	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.2409	1.326963	1.326963	1.326963	1.326963	1.326963	1.326963	1.326963	1.326963	1.326963	1.326963	1.80%
Offshore Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Total	**2.734404**	**2.925104**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.433504**	**3.519567**	**3.519567**	**3.519567**	**3.519567**	**3.519567**	**3.519567**	**3.519567**	**3.519567**	**3.519567**	**3.519567**	**0.60%**
Electricity Generation (billion kilowatthours)																																
Conventional Hydropower	3.668	5.181	4.178792	4.029118	4.116045	4.202414	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	-0.70%
Geothermal 2/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Biogenic Municipal Waste 5/	2.675869	2.845969	2.441952	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	2.474459	-0.50%
Wood and Other Biomass	0.204118	0.180874	0.282127	0.273987	0.406239	0.790387	2.565324	4.252911	4.27716	4.937132	5.434409	6.041396	6.168731	6.554143	6.64433	6.72366	6.806322	6.88362	6.864339	6.916592	6.800614	6.719917	6.696919	6.535673	6.21058	5.931857	6.387416	6.591577	6.685634	6.692264	6.692503	13.30%
Solar Thermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Solar Photovoltaic 4/	0.028	0.119	0.24259	0.275359	0.275991	0.275635	0.27541	0.275643	0.275634	0.275634	0.275481	0.275945	0.275699	0.275989	0.275037	0.274754	0.274741	0.275718	0.274402	0.274779	0.275162	0.275355	0.274973	0.274882	0.274893	0.274334	0.27406	0.274265	0.274265	0.274915	0.274877	2.90%
Wind	1.836	1.94	2.315036	3.166461	3.168413	3.168167	3.168187	3.166975	3.166975	3.167128	3.16616	3.166129	3.167006	3.166719	3.168584	3.168734	3.170979	3.169443	3.169243	3.169388	3.168295	3.302804	3.396775	3.396714	3.396613	3.396809	3.398696	3.398393	3.398393	3.396242	3.397954	2.00%
Offshore Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Total	**8.411987**	**10.266844**	**9.460496**	**10.219383**	**10.441147**	**10.911062**	**12.755108**	**14.441716**	**14.465965**	**15.126081**	**15.622236**	**16.229656**	**16.357624**	**16.743038**	**16.834137**	**16.913336**	**16.998228**	**17.074968**	**17.054171**	**17.106947**	**16.990259**	**17.044264**	**17.114853**	**17.053356**	**16.628273**	**16.349186**	**16.80636**	**17.010422**	**17.104479**	**17.10961**	**17.111521**	**1.80%**
Energy Consumption 6/ (quadrillion Btu)																																
Conventional Hydropower	0.035785	0.050546	0.040768	0.039308	0.040156	0.040999	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	-0.70%
Geothermal 2/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Biogenic Municipal Waste 5/	0.038373	0.04033	0.033328	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	0.033771	-0.60%
Wood and Other Biomass	0.000093	0.000091	0.005247	0.005163	0.006615	0.010711	0.027785	0.04514	0.04543	0.052275	0.0566	0.063581	0.065038	0.069079	0.070268	0.07112	0.07211	0.07297	0.072785	0.073382	0.072064	0.071116	0.070873	0.070187	0.066153	0.063623	0.06823	0.070495	0.071483	0.071556	0.071559	25.80%
Solar Thermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Solar Photovoltaic 4/	0.000273	0.001161	0.002367	0.002686	0.002693	0.002689	0.002687	0.002689	0.002689	0.002689	0.002688	0.002692	0.00269	0.002693	0.002683	0.002681	0.00268	0.00269	0.002677	0.002681	0.002684	0.002686	0.002683	0.002682	0.002682	0.002676	0.002674	0.002676	0.002676	0.002682	0.002682	2.90%
Wind	0.017912	0.018927	0.022585	0.030892	0.030911	0.030909	0.030909	0.030897	0.030897	0.030899	0.030889	0.030889	0.030897	0.030895	0.030913	0.030914	0.030936	0.030921	0.030919	0.03091	0.03091	0.032222	0.033139	0.033138	0.033137	0.033139	0.033158	0.033155	0.033155	0.033134	0.03315	2.00%
Offshore Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Total	**0.092436**	**0.111054**	**0.104295**	**0.111821**	**0.114146**	**0.119079**	**0.136827**	**0.154173**	**0.154462**	**0.161309**	**0.165623**	**0.172608**	**0.174072**	**0.178112**	**0.179311**	**0.180161**	**0.181173**	**0.182027**	**0.181827**	**0.18243**	**0.181105**	**0.181471**	**0.18214**	**0.181454**	**0.177419**	**0.174885**	**0.179507**	**0.181772**	**0.18276**	**0.182818**	**0.182837**	**1.70%**
End-Use Generators 7/																																
Generating Capacity (gigawatts)																																
Conventional Hydropower	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Geothermal 2/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Municipal Waste	0.070533	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.082499	0.00%
Wood and Other Biomass	0.081987	0.101362	0.102613	0.106583	0.122195	0.14799	0.155403	0.169174	0.17774	0.184481	0.190373	0.196831	0.20492	0.208639	0.215966	0.221974	0.227906	0.232465	0.239016	0.245732	0.251751	0.258302	0.264678	0.27133	0.278254	0.284964	0.291744	0.300872	0.309775	0.317972	0.325479	4.10%
Solar Photovoltaic 4/	0.305143	0.596478	1.318352	1.859749	2.284173	2.681721	3.017634	3.034562	3.057156	3.084276	3.122363	3.16238	3.203113	3.246181	3.309537	3.377564	3.446832	3.516707	3.620164	3.706224	3.80087	3.905155	4.011296	4.13066	4.259914	4.397598	4.531159	4.663329	4.800201	4.948571	5.099048	7.70%
Wind	0.018443	0.033404	0.051007	0.070538	0.113961	0.183214	0.24436	0.244376	0.24445	0.244688	0.245363	0.246498	0.2487	0.253003	0.260556	0.269671	0.279426	0.29014	0.303314	0.316851	0.33112	0.345627	0.360263	0.375162	0.390243	0.405504	0.420902	0.436411	0.452133	0.468117	0.484328	9.70%
Total	**0.476107**	**0.813744**	**1.554472**	**2.119369**	**2.602829**	**3.095424**	**3.499896**	**3.530611**	**3.561846**	**3.595944**	**3.641598**	**3.688209**	**3.739302**	**3.790322**	**3.868557**	**3.951707**	**4.036663**	**4.121811**	**4.245194**	**4.351306**	**4.46624**	**4.591583**	**4.718736**	**4.859652**	**5.01091**	**5.170565**	**5.326304**	**5.483112**	**5.644609**	**5.817159**	**5.991354**	**7.10%**
Electricity Generation (billion kilowatthours)																																
Conventional Hydropower	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Geothermal 2/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Municipal Waste	0.34174	0.326678	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	0.591653	2.10%
Wood and Other Biomass	0.651422	0.630309	0.637731	0.659968	0.692937	0.772122	0.815398	0.895796	0.945808	0.985163	1.019559	1.057262	1.104489	1.126202	1.168975	1.204051	1.238682	1.265303	1.303547	1.342755	1.377897	1.41614	1.453363	1.4922	1.532623	1.571797	1.611379	1.664672	1.716651	1.764506	1.808329	3.70%
Solar Photovoltaic 4/	0.409813	0.806027	1.802251	2.560143	3.160428	3.73045	4.215456	4.240055	4.273129	4.312971	4.369528	4.426065	4.485132	4.547719	4.640466	4.740125	4.841562	4.943943	5.094161	5.2197	5.357451	5.508321	5.662053	5.834475	6.022039	6.221733	6.415709	6.607841	6.806871	7.022413	7.241122	7.90%
Wind	0.026787	0.048513	0.074075	0.102439	0.165681	0.266549	0.355493	0.355517	0.355625	0.355975	0.356966	0.358635	0.361972	0.368191	0.379287	0.392679	0.407011	0.422752	0.442108	0.461996	0.482959	0.504272	0.525773	0.547662	0.569816	0.592234	0.614852	0.63763	0.660714	0.684169	0.707936	9.70%
Total	**1.429762**	**1.811527**	**3.105709**	**3.914203**	**4.610699**	**5.360773**	**5.978**	**6.083021**	**6.166215**	**6.245761**	**6.337706**	**6.433615**	**6.543246**	**6.633766**	**6.780382**	**6.928507**	**7.078908**	**7.22365**	**7.431469**	**7.616104**	**7.809959**	**8.020386**	**8.232814**	**8.46599**	**8.716131**	**8.977416**	**9.233593**	**9.501796**	**9.775888**	**10.06274**	**10.34904**	**6.20%**
Energy Consumption (quadrillion Btu)																																
Conventional Hydropower	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Geothermal 2/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Municipal Waste	0.012017	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.014054	0.00%
Wood and Other Biomass	0.004189	0.004056	0.004133	0.004282	0.004701	0.005707	0.006256	0.007277	0.007912	0.008412	0.008849	0.009328	0.009928	0.010204	0.010747	0.011192	0.011632	0.01197	0.012456	0.012954	0.0134	0.013886	0.014358	0.014852	0.015365	0.015863	0.016365	0.017042	0.017702	0.01831	0.018867	5.40%
Solar Photovoltaic 4/	0.004092	0.00802	0.01796	0.02556	0.031603	0.037398	0.042355	0.0426	0.042928	0.043323	0.043889	0.044454	0.045045	0.04567	0.046604	0.047607	0.04863	0.049662	0.051172	0.052432	0.053815	0.055333	0.056879	0.058611	0.060495	0.062501	0.06445	0.066381	0.068379	0.070542	0.072737	7.90%
Wind	0.000276	0.000501	0.000765	0.001058	0.001711	0.002752	0.003667	0.003668	0.003669	0.003672	0.003682	0.003698	0.003731	0.003791	0.0039	0.00403	0.00417	0.004324	0.004513	0.004707	0.004911	0.005119	0.005329	0.005542	0.005758	0.005977	0.006198	0.00642	0.006645	0.006874	0.007106	9.60%
Total	**0.020575**	**0.02663**	**0.036912**	**0.044953**	**0.052068**	**0.05991**	**0.066332**	**0.067598**	**0.068563**	**0.069461**	**0.070473**	**0.071534**	**0.072757**	**0.073719**	**0.075304**	**0.076883**	**0.078485**	**0.080009**	**0.082194**	**0.084146**	**0.08618**	**0.088391**	**0.09062**	**0.093059**	**0.095672**	**0.098394**	**0.101067**	**0.103896**	**0.106779**	**0.10978**	**0.112763**	**5.10%**
All Sectors																																
Generating Capacity (gigawatts)																																
Conventional Hydropower	1.249	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	1.2516	0.00%
Geothermal 2/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Municipal Waste	0.730737	0.745903	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.751603	0.00%
Wood and Other Biomass	0.128987	0.148362	0.149613	0.153583	0.169195	0.19499	0.202403	0.216174	0.22474	0.231481	0.237373	0.243831	0.25192	0.255639	0.262966	0.268974	0.274906	0.279465	0.286016	0.292732	0.298751	0.305302	0.311678	0.31833	0.325254	0.331964	0.338744	0.347872	0.356775	0.364972	0.372479	3.20%
Solar 4/	0.342743	0.777778	1.543252	2.084649	2.509073	2.906621	3.242534	3.259462	3.282056	3.309176	3.348263	3.38728	3.428013	3.471081	3.534437	3.602464	3.671732	3.741607	3.845264	3.931124	4.02577	4.130055	4.236196	4.355559	4.484814	4.622498	4.756059	4.888229	5.025101	5.17347	5.323948	6.90%
Wind	0.759043	0.815204	1.291907	1.311438	1.354861	1.424114	1.48526	1.485276	1.48535	1.485588	1.486263	1.487399	1.48967	1.493903	1.501456	1.510571	1.520326	1.53104	1.544214	1.557751	1.57202	1.67259	1.687226	1.702126	1.717206	1.732467	1.747865	1.763374	1.779097	1.79508	1.811291	2.80%
Total	**3.210511**	**3.738848**	**4.987976**	**5.552874**	**6.036333**	**6.528928**	**6.9334**	**6.964115**	**6.99535**	**7.029449**	**7.075101**	**7.121713**	**7.172807**	**7.223826**	**7.302061**	**7.385211**	**7.470167**	**7.555315**	**7.678698**	**7.784811**	**7.899745**	**8.111151**	**8.238303**	**8.379218**	**8.530477**	**8.690132**	**8.845872**	**9.002679**	**9.164176**	**9.336726**	**9.510921**	**3.30%**
Electricity Generation (billion kilowatthours)																																
Conventional Hydropower	3.668	5.181	4.178792	4.029118	4.116045	4.202414	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	4.271729	-0.70%
Geothermal 2/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Municipal Waste 8/	3.017609	3.172648	3.033605	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	3.066112	-0.10%
Wood and Other Biomass	0.85554	0.811183	0.919858	0.933956	1.099176	1.562509	3.380722	5.148707	5.222967	5.922295	6.453968	7.098658	7.273221	7.680346	7.813305	7.92771	8.045004	8.148924	8.167886	8.259347	8.178512	8.136057	8.150282	8.127773	7.743202	7.503654	7.998795	8.256248	8.402285	8.45677	8.500832	8.40%
Solar 4/	0.437813	0.925027	2.044841	2.835502	3.436419	4.006085	4.490865	4.515698	4.548773	4.588605	4.64501	4.702011	4.760832	4.823709	4.915504	5.014879	5.116302	5.21966	5.368563	5.494479	5.632613	5.783676	5.936998	6.109357	6.296932	6.496066	6.689769	6.882106	7.081137	7.297328	7.515999	7.50%
Wind	1.862787	1.988513	2.38911	3.268899	3.334094	3.434715	3.52368	3.522492	3.5226	3.523103	3.523126	3.524764	3.528978	3.53491	3.547871	3.561413	3.57799	3.592195	3.611351	3.631384	3.651254	3.807076	3.922548	3.944376	3.966429	3.989043	4.013548	4.036023	4.059107	4.08041	4.10589	2.50%
Total	**9.841748**	**12.07837**	**12.566206**	**14.133587**	**15.051846**	**16.271833**	**18.733107**	**20.524736**	**20.632181**	**21.371841**	**21.959944**	**22.663273**	**22.900871**	**23.376804**	**23.614519**	**23.841843**	**24.077135**	**24.29862**	**24.48564**	**24.723051**	**24.800217**	**25.064648**	**25.34767**	**25.519346**	**25.344404**	**25.326601**	**26.039951**	**26.512217**	**26.880369**	**27.172348**	**27.460562**	**2.90%**
Energy Consumption 6/ (quadrillion Btu)																																
Conventional Hydropower	0.035785	0.050546	0.040768	0.039308	0.040156	0.040999	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	0.041675	-0.70%
Geothermal 2/	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 - -	
Municipal Waste 8/	0.05039	0.054383	0.047381	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	0.047825	-0.40%
Wood and Other Biomass	0.004282	0.004147	0.00938	0.009446	0.011316	0.016417	0.034042	0.052418	0.053342	0.060687	0.06545	0.072909	0.074966	0.079282	0.081015	0.082313	0.083742	0.08494	0.085241	0.086336	0.085464	0.085002	0.085231	0.085039	0.081518	0.079486	0.084595	0.087537	0.089185	0.089866	0.090425	11.20%
Solar 4/	0.004365	0.009181	0.020326	0.028246	0.034296	0.040087	0.045042	0.045289	0.045617	0.046012	0.046577	0.047146	0.047734	0.048363	0.049287	0.050288	0.05131	0.052351	0.05385	0.055113	0.0565	0.058019	0.059561	0.061293	0.063177	0.065177	0.067124	0.069056	0.071054	0.073224	0.075418	7.50%
Wind	0.018189	0.019428	0.02335	0.03195	0.032622	0.033661	0.034576	0.034565	0.034566	0.034571	0.034571	0.034587	0.034628	0.034686	0.034812	0.034944	0.035106	0.035245	0.035432	0.035627	0.035821	0.037341	0.038468	0.038681	0.038896	0.039116	0.039356	0.039575	0.0398	0.040008	0.040256	2.50%
Total	**0.11301**	**0.137685**	**0.141207**	**0.156774**	**0.166214**	**0.178989**	**0.20316**	**0.221772**	**0.223025**	**0.23077**	**0.236097**	**0.244142**	**0.246828**	**0.251831**	**0.254615**	**0.257045**	**0.259658**	**0.262036**	**0.264022**	**0.266576**	**0.267285**	**0.269862**	**0.27276**	**0.274512**	**0.273091**	**0.273279**	**0.280574**	**0.285668**	**0.289539**	**0.292598**	**0.2956**	**2.70%**

1/ Includes electricity-only and combined heat and power plants that have a regulatory status.
2/ Includes both hydrothermal resources (hot water and steam) and near-field enhanced geothermal systems (EGS). Near-field EGS potential occurs on known hydrothermal sites, however this potential requires the addition of external fluids for electricity generation and is only available after 2025.
3/ Includes all municipal waste, landfill gas, and municipal sewage sludge. Incremental growth is assumed to be for landfill gas facilities. All municipal waste is included, although a portion of the municipal waste stream contains petroleum-derived plastics and other non-renewable sources.
4/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2010, EIA estimates that as much as 245 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2010, plus an additional 558 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See U.S. Energy Information Administration, Annual Energy Review 2011, DOE/EIA-0384(2011) (Washington, DC, September 2012), Table 10.9 (annual PV shipments, 1989-2010). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.
5/ Includes biogenic municipal waste, landfill gas, and municipal sewage sludge. Incremental growth is assumed to be for landfill gas facilities. Only biogenic municipal waste is included. The U.S. Energy Information Administration estimates that in 2010 approximately 6 billion kilowatthours of electricity were generated from a municipal waste stream containing petroleum-derived plastics and other non-renewable sources. See U.S. Energy Information Administration, Methodology for Alloc