Corrections to

100 Percent Clean, Renewable Energy and Storage for Everything

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Chapter 3

P. 87, Table 3.1. The 100-y CO_2e of SO_2-S- from a coal plant should be -296 instead of -393 g-CO_2e/kWh, and the total from the coal plant should be 879 instead of 789 g-CO_2e/kWh.

P. 87, Table 3.1. The 100-y CO_2e of SO_2-S- from a natural gas combined cycle plant should be -0.59 instead of -2 g-CO_2e/kWh, and the total from the plant should be 566 instead of 565 g-CO_2e/kWh.

P. 87, last sentence. Change "8 percent less" to "19 percent less"

P. 88, first sentence. Change "28 percent less" to "36 percent less"

P. 88, last paragraph on left. Change "565" to "566"

P. 88, last paragraph on left. Change "~780" to "~879"

P. 88, last paragraph on left. Change "78 times" to "88 times"

P. 93, first paragraph on right. Change "Plant B is down an additional…" to "Plant A is down an additional…" and change "emit pollution with Plant B" to "emit pollution with Plant A"

P. 119. Second paragraph. Antoine Henri Becquerel lived from 1852 to 1908.

P. 135. Problem 3.13. Clarify the third sentence to the following: "Assume the additional cost of the CCS equipment is 75% of the energy cost of the natural gas plant."

Chapter 4

P. 141, caption to Figure 4.1. The last sentence should be, "The voltage drops back to zero as the current passes through the light bulb."

P. 141. Right column, 2nd paragraph. Change “each electron carries a lot of charge” to “each electron carries a lot of energy.”

P. 155. Summary. Second line should be “inductors” rather than “inducers.”

Chapter 5

P. 160, after Equation 5.1, the speed of light should be 3×10^8 m/s.

P. 164, Section 5.1.5. Should be “A PV panel consists of either 32, 36, 48, 60, 72, 96, or 128 pre-wired cells.”

P. 171. Right column, last paragraph, change last sentence to “Finally, the sun reaches its maximum declinations of 23.5^o north and south of the equator at the Northern-Hemisphere summer and winter solstices, respectively, and its minimum declination (0^o) at the vernal and autumnal equinoxes.”

Chapter 6

P. 202. Second paragraph. Change “skewed toward higher wind speed” to “stretched toward higher wind speed”

P. 216. Section 6.6.6.3. Change “electricity consumer” to “electricity producer”

P. 222. Table 6.5, row (j), the values should be 20 trillion and 22 trillion, respectively, instead of 2 trillion and 2.2 trillion.

P. 228. Figure 6.20. Change “Supbolar” to “Subpolar” twice in the figure.

P. 245. Right column. Change “detear” to “deter”

Chapter 7

Table 7.9, Column (b), first row. Change (1+i)(a) to $(1+i)^{(a)}$

P. 278, 3rd Transition highlight. Change “2.6 million per year (37 percent of all deaths)” to “3.7 million per year (53 percent of all deaths)”

Chapter 8

P. 301. Left column, first paragraph. Change “all four locations” to “all locations”

P. 313. In Equations (8.20)-(8.22), the term
$(L_{heat,r} - L_{cold,r})F_{dh}$ should be changed to $(L_{heat,r} + L_{cold,r})F_{dh}$
$(L_{heat,c} - L_{cold,c})F_{dh}$ should be changed to $(L_{heat,c} + L_{cold,c})F_{dh}$
$(L_{heat,i} - L_{cold,i})F_{dh}$ should be changed to $(L_{heat,i} + L_{cold,i})F_{dh}$

Chapter 9

P. 377, left column, 2nd-to-last paragraph. Change the first two sentences to

“Averaged worldwide, the social cost per kWh of a new WWS system is about 20 percent that of a new BAU system (Table 8.9). However, because a WWS system uses only 43 percent of the energy of a BAU system, the aggregate social cost of a WWS system is about 9 percent that of a BAU system (Table 8.9)."