# An Inconvenient Sequel: Truth to Power Worksheet – Part II Instructor: Tony Del Vecchio

1. What are some of the positive changes taking place that Gore mentions which makes him feel optimistic as regards climate change? Give two examples.

On August 7, 2016, 100% of Scotland's electricity came from wind power.

In May 2016, Portugal operated for four days straight on renewable energy alone.

2. Globally, wind power could supply worldwide electricity by what factor?

Global wind power could supply worldwide electricity by a factor of 40, i.e., 40 times

- 3. In 2002, how much was the solar energy market predicted to grow by the year 2010? By what factor did we beat that goal? By 2015, by what factor had the solar energy market grown?
  - One gigawatt
  - 17 times
  - 58 times
- 4. What is the one main factor that explains the rapid growth of solar power?

The main factor that explains the rapid growth of soar power is the fact that the cost of silicon solar cells continues to go down.

5. According to New York Attorney General Eric Schneiderman, which organization has been actively seeking to distort the energy market? If proven to be true, what crimes would they be guilty of having committed?

Schneiderman thinks that the American Petroleum Institute (i.e., the oil and gas industry) has been actively seeking to distort the energy market. If proven to be true, the organization would be guilty of consumer and securities fraud.

6. What is the major incentive for China has to move away from fossil fuels as sources of energy?

The major incentive China has for moving away from fossil fuels is the fact that life expectancy there has gone down by 5 and ½ years because of air pollution.

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7. Why has India been so insistent on continuing to use fossil fuels, despite the damage to the atmosphere that oil, gas, and coal are causing?

India had been insistent on continuing to use fossil fuels for economic reasons. As a developing country, they have asserted that they need this energy source in order to provide jobs for its people.

8. According to Gore, how much global warming pollution are we putting into the atmosphere every day? How does he describe the way we are treating the atmosphere?

We are putting 110 million tons of global warming pollution (i.e., carbon dioxide) into the atmosphere every day. Gore says that by doing so we are treating the atmosphere like "an open sewer."

- 9. What has been happening in many Asian countries due to global warming? Give examples.
  - In India, in May 2015 the temperature reached 123.8° F (51° C), causing streets to melt.
  - All-time heat records have been broken in Thailand, Cambodia, and Laos.
  - In Pakistan, over 1,200 people died in heat waves.
- 10. What health risk does the higher temperatures have as we shift the balance between microbes and human beings through global warming?

As the balance between microbes and human beings has shifted due to climate change, we have seen the spread of viruses like Zika because the range of disease-carrying mosquitoes has expanded. In addition, the warmer temperatures have sped up the incubation rate inside the mosquito, resulting in an explosion in the number of cases. For the first time in history, pregnant women have been advised not to go to certain parts of the United States. And in Central and South America, doctors have been advising women not to get pregnant until they could get a handle on what's going on.

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## 11. What direct consequence do the increasing temperatures and extra heat energy have? What two examples does Gore point to?

As a direct consequence of increasing temperatures, ocean-based storms cross much warmer ocean waters, causing the storms to get stronger and more destructive.

Superstorm Sandy crossed ocean areas that were 9° F (5° C) warmer than normal, causing tremendous destruction in New York and New Jersey.

Super Typhoon Haiyan in the Philippines crossed areas of the Pacific that were 5.4° F (3° C) warmer than normal. Haiyan became the strongest and most destructive ocean-based storms ever to make landfall.

### 12. What are three other consequences of the global warming besides increased storm activity?

- As a result of the warming of the oceans, water vapor coming off the ocean increases significantly and more of it falls at the same time, causing a phenomenon now referred to as "rain bombs."
- In addition, heat sucks soil moisture out of the ground, making droughts deeper and longer.
- Increased atmospheric temperatures also causes vegetation to dry out, causing fires to increase.