**Can 100% renewable energy power the world?**

[**https://youtu.be/RnvCbquYeIM**](https://youtu.be/RnvCbquYeIM)

Every year, the world uses 35 billion barrels of oil. This massive scale of fossil fuel dependence pollutes the earth, and it won’t last forever. On the other hand, we have abundant sun, water and wind, which are all renewable energy sources. So why don’t we exchange our fossil fuel dependence for an existence based only on renewables?

1. Approximately how long are fossil fuels going to last (at the present level of consumption)?

a.  10 years b. Forever c. Millennia d. A century

1. The sun shines lots of energy towards the earth. Approximately how many times more than our present levels of consumption?

a. 10,000 b. 2 c. 100 d.  1,000,000

3. If we replaced ALL our present energy needs with solar cells, how much of the surface would need to be covered?

a.  1 square kilometer  b. 1 million square kilometers

c.  10,000 square kilometers  d. 1 billion square kilometers

4. In theory, we could fly a large transatlantic flight by using batteries to power the aircraft. How many tons of batteries should the plane load for such a flight?

a.  100  b. 1000 c.  10  d. 1

5. At present, fossil fuels constitute our major source of primary energy, yet they are also the cause of large looming problems. Which among them seems the most dangerous one?

  a. Pollution b. Acid rains

c. Climate change d.  Depletion and near future shortages

6. Which one among the so-called renewable energy technologies (solar, wind, biomass, geothermal, etc.) has the potential for providing most of the energy needed by humanity in the near future? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. Fueling automotive vehicles in the future will be a major challenge. Which technology is the most promising and why: batteries or synthetic fuels produced with solar energy?

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8. The best areas for large renewable energy power plants are far away from large cities, where energy is mostly needed. Which will be the most convenient approach to solve this problem?

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9. The transition to all renewable energy is a complex problem involving\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,

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