

Topics to be explored

- 1 **Overviews of Energy, Resources, Sustainability & Climate**
2 **Natural photosynthesis, nature's decarbonization, Biofuels, Biomass**
3 **Nexus of Water - Energy – Food - & other environmental factors**
4 **Batteries (incl. some comparisons with Fuel and PV cells)**
5 **H₂, H₂ for CO₂ - / N₂ – reduction; hype & hope**

SCHEDULE

All homework on topic X needs to refer to the relevant ppt files on topic X in the dropbox.

FRIDAY June 19, by midnight, submit homework slide on topics 1

MONDAY June 22 **13:30-16 a.m.** 1st Meeting discuss student ppt slides on TOPICS 1

TUESDAY, June 23, by 09 a.m., submit homework slide on TOPICS 2

14-16 p.m. discuss student ppt slides on TOPICS 2

WEDN. June 24 by **09 a.m.**, submit homework slide on TOPICS 3

13-15 p.m. discuss student ppt slides on TOPICS 3

by **20 p.m.**, submit homework slide on topics 4

THURSDAY June 25 11-13 a.m. discuss student ppt slides on TOPICS 4

18 p.m., submit homework slide on topics 5

FRIDAY June 26 **09-11 a.m.** discuss student ppt slides on TOPICS 5

Dynamics of the course:

Before the first meeting (at the latest by Friday June 19 noon) one or more PPT files on each of the topics 1, 2, 3, 4 & 5 will be made available to each student in a special dropbox folder. To get access, ***you will need to register beforehand by sending an email to me with name, email address and university education background:*** david.cahen@weizmann.ac.il

For each set of topics you need to use the information in the relevant file(s), to prepare 1, maximum 2 slides on each topic. The slide should have your homework, which provides:

- ⇒ Constructive criticism, e.g., correcting a mistake or
- ⇒ Clarification of an unclear /ambiguous statement/conclusion, based on clear logic and/or relevant additional information or
- ⇒ confirmation of information from alternative independent source(s)

Whichever of the above you choose, it must be based on clear **QUANTITATIVE** information, and it must provide (semi) quantitative information, using your own calculations and logic.

Each statement, number, logical step must be referenced, not just with proper literature references with embedded URL, but also with page, column, and paragraph of the source you used.

Make sure that your sources can be traced directly to peer-reviewed reports (e.g., if you use data from Statista or World-in-Data).

IEA, IPCC, IRENA, and the like can be considered peer-reviewed; be careful with data from clear stakeholders, e.g., Nuclear/Wind/Geothermal Societies, and double-check these.

You can use AI, but if you use it beyond guiding you to get information, it will be rather easy to detect, and your HW will be void. You can use Microsoft Notebook LM to help you find relevant information in each source file.