

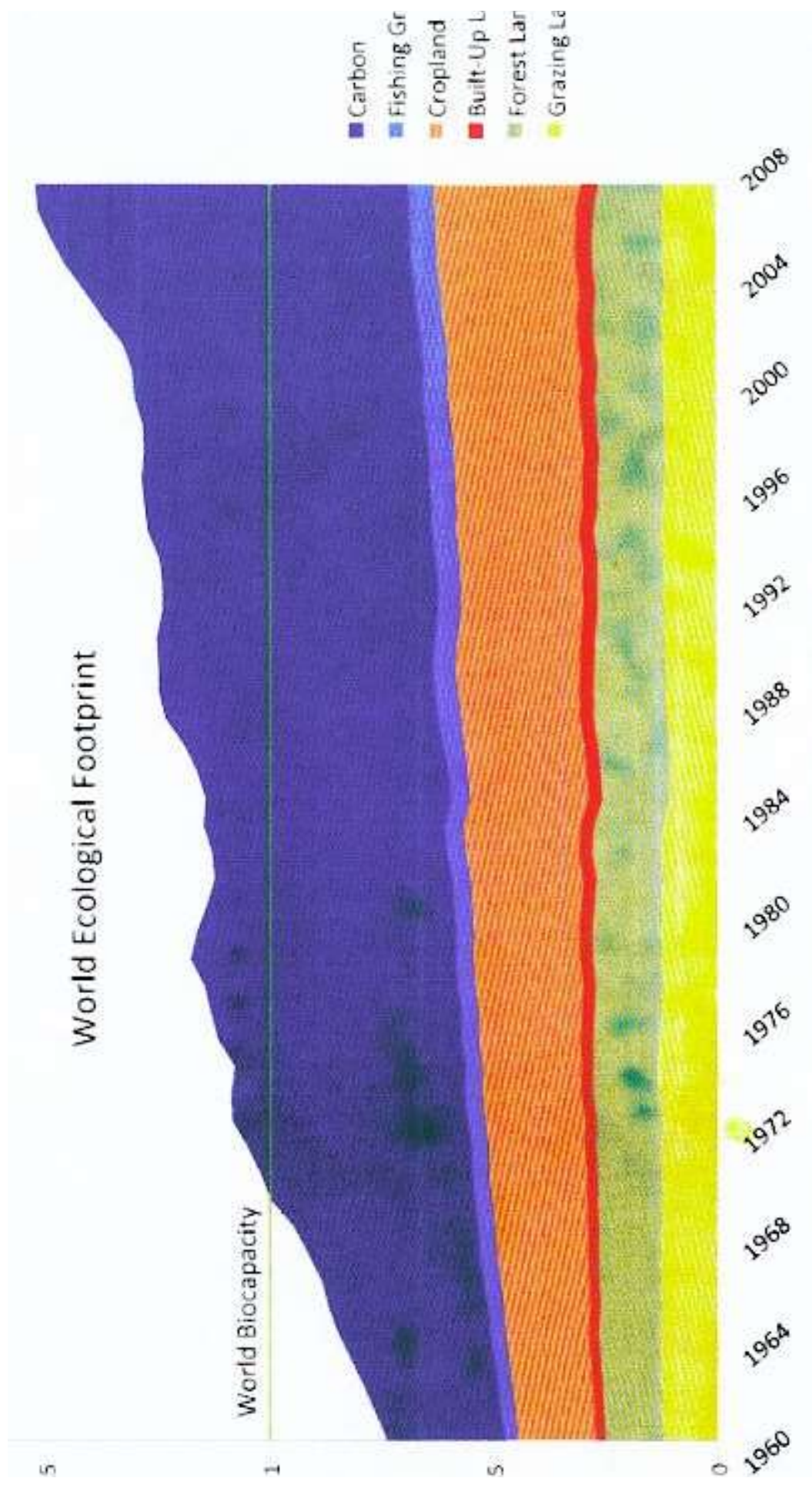
A Leap to an Ecological Economy, 3rd edition



- Paradigm shift: see “The Essential Paradigm Shift,” Phyllis Creighton and Derek Paul. This is an unpublished paper that derives from a similar conference paper (2004). see www.derekleverpaul.ca



Footprint layer cake



The four essentials

- Adopting the new paradigm
- Creating natural wealth, to rebuild biocapacity
- Getting to zero emissions technologically
- Deep adaptation

Ch 3 List of needed changes

- a) a clear distinction between wealth and money, and taking care to increase wealth; assessment of wealth in terms of natural, built and human capital, and accounting in these terms;
- b) consistent full employment;
- c) an end to fossil-fuel burning;
- d) minimal extraction of primary resources; and tree cutting, by maximum re-use and recycling;

List (cont., 2)

- e) pursuit of ecologically sound goals and practices in business and industries, and in city and regional development;
- f) a preference for local production, where beneficial, with changes in long-distance trade to match;
- g) a transformation of the advertising industry;

List (cont., 3)

- h) more benefit corporations, with a legislative basis for them everywhere, and perhaps global standardization of their legal basis, and encouragement of other ecological enterprises;
- i) publicly-owned banks (or equivalent institutions) in all single-currency areas, for funding what needs to be done in the EE context;
- J) clearly defined global commons, with formation and implementation of policies for their restoration or enrichment;

List (cont., 4)

- k) sound population policies in all regions, with implementation of policy goals;
- l) increasing organic farming with a view to eliminating pesticides and herbicides for the sake of planetary health, and improving food quality and nutrition; and for increased carbon sequestration; and rationalizing medicine for the improvement of human health;

List (cont., 5)

- m) decreasing militarism and increasing international cooperation;
- n) a progressive reduction of social inequalities;
- o) new indices, including capital wealth indices to replace GDP for assessment of prosperity and human welfare and the good state of the planet.

Natural wealth creation

- Chapter Six: organic farming, tend forests, in both cases improving soil; clean up waterways, etc

Bourne, plus organic farming biblio

- Joel K Bourne *The End of Plenty*
- Gabe Brown *Dirt to Soil*
- Eliot Coleman *The New Organic Grower*
- Andrew Mefford *The Organic No-Till Farming Revolution*

Organic growing

- The food is more nutritious;
- The soil keeps on improving with time, provided the farmer knows how to achieve this; the soil and thus the Earth itself are thereby enriched;
- Manufactured fertilisers, which depend on non-renewable resources are not required.
- The total sequestration of CO₂ if all farms were organic, worldwide, is equal to the current ghg emissions from global, industry, buildings and transport. (Rodale Institute' White paper , Sept 2020)

Projections

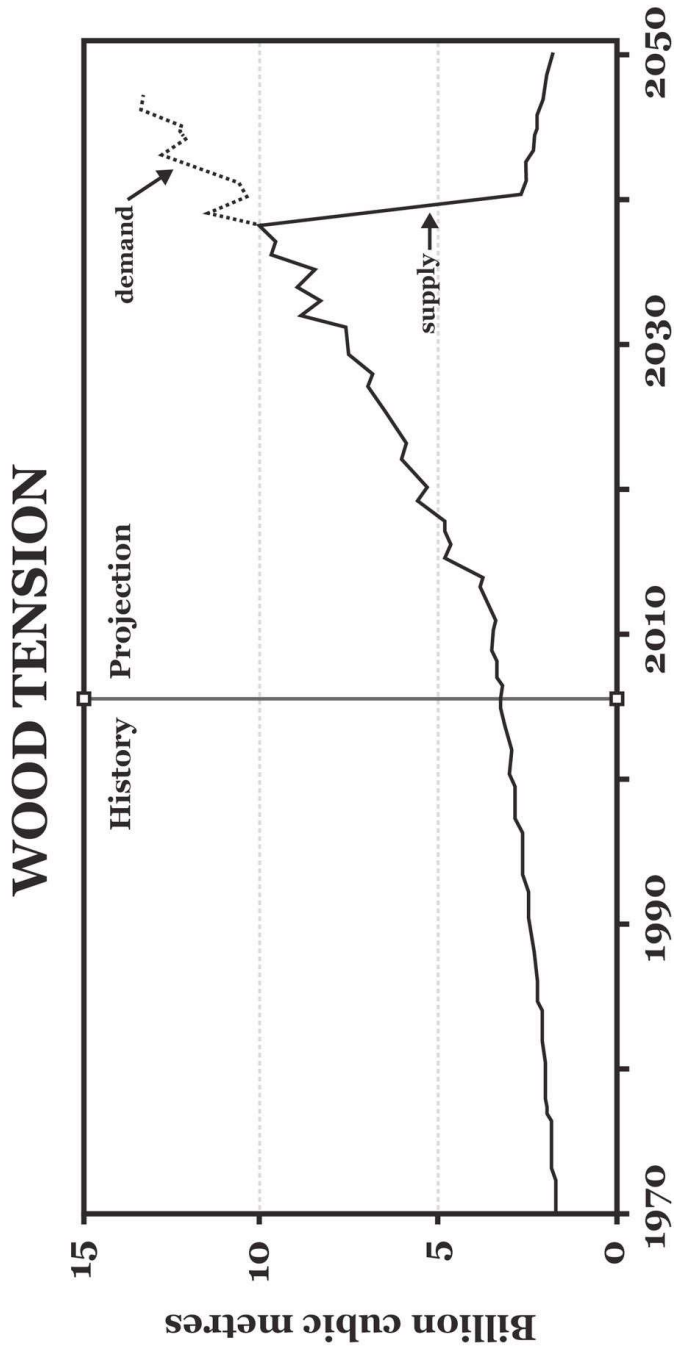


Numerically reliable bad news

Under *laissez-faire*, crucial points will be arrived at by the following dates:

- Forests 2038
- Food 2040-2050
- Ocean Fish 2048

Wood Tension under laissez-faire



End of ocean fishing—2048

Appendix 2: B Worm et al. “Impacts of biodiversity loss on ecosystem services” *Science* **314** (2006) pp. 9884-9888

Full Employment

See Ch 7

Technology

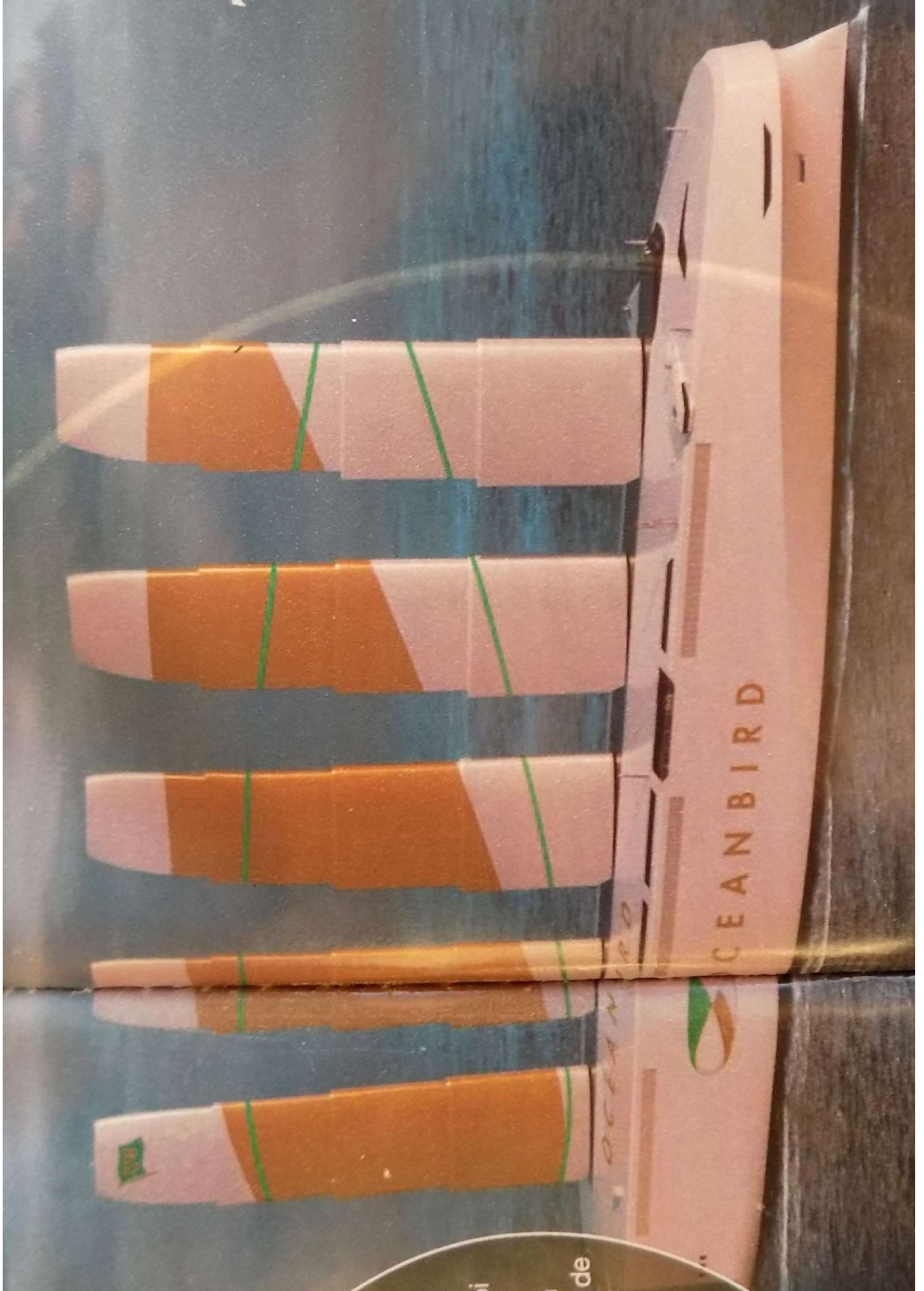
- Israël-Hayom, Eviation's "Alice"
- Sweden's transatlantic wind-driven cargo ship
- France's 3000-km range fuel-cell aircraft
- .

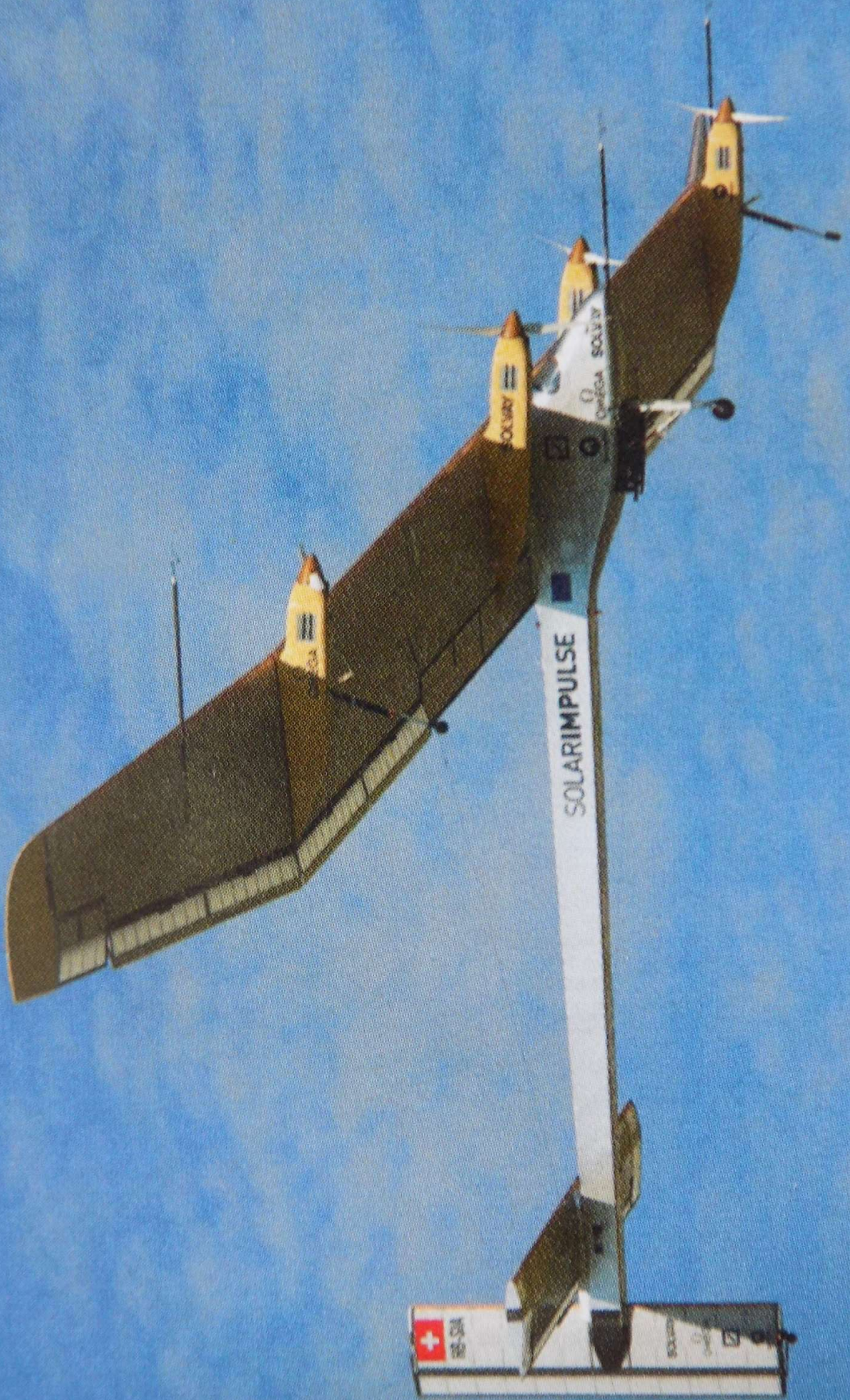




Marine Benoit, Loïc Chauveau,
Fabrice Nicot, Sylvie Rouat

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Bertrand Piccard

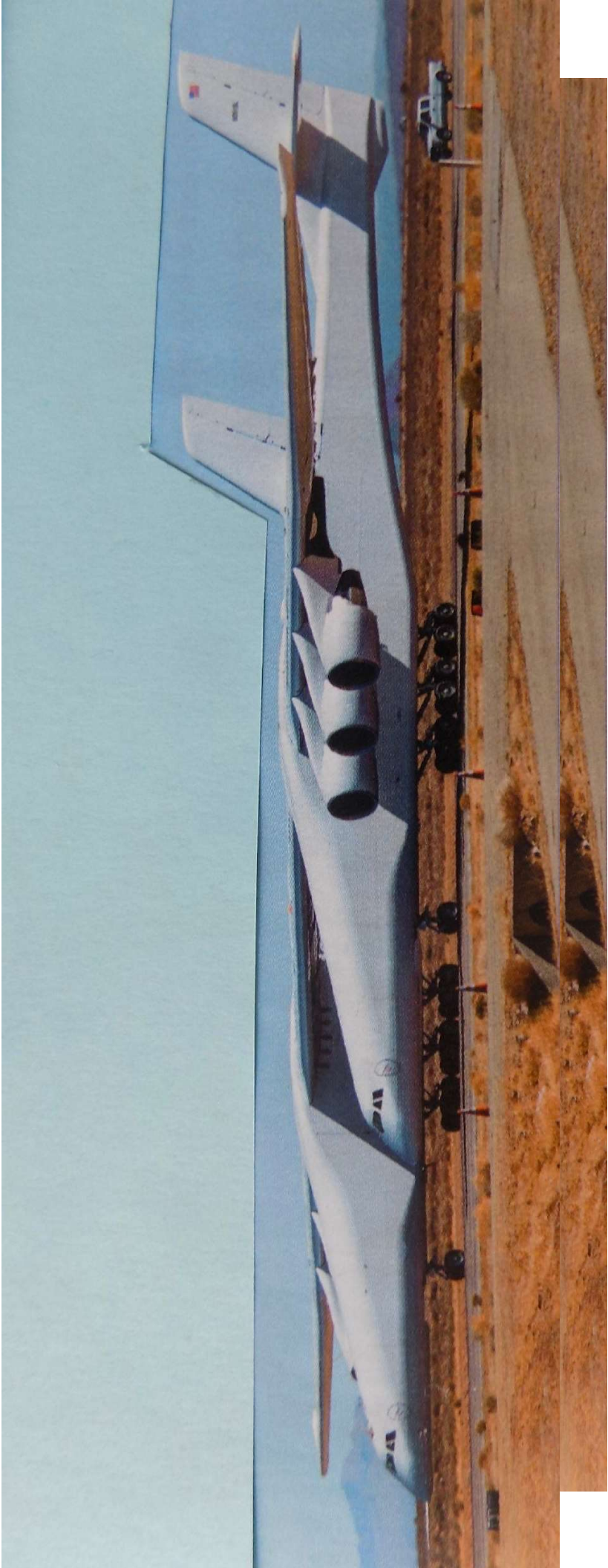
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The world's largest plane



Electric land transport

- Beware of what you see and read: nearly all of new electric vehicles are designed on the basis that power, weight, and power/weight ratios in the future will be as they are today.
- This is simply not possible on the basis of likely non-carbon energy availability.
- Therefore, all land transport likely needs to be redesigned to require much less energy/km

Shouldn't we be encouraging "conversations" among governments, vehicle manufacturers and the public NOW on what is required in the last phases of gasoline propulsion, rather than merely continuing with gaz-guzzlers?



Voluntary simplicity

- Duane Elgin *Voluntary Simplicity Second Revised Edition: Toward a Way of Life that is Outwardly Simple, Inwardly Rich* William Morrow paperbacks 2010
- Daniel Doherty and Amitai Etzioni eds. *Voluntary Simplicity: Responding to Consumer Culture* Roman and Littlefield 2003
- Linda Breen Pierce *Choosing Simplicity: Real People Finding Peace and Fulfillment in a Complex World* Gallagher Press 2000

Auroville

- Anu Majumdar gives a detailed account of the development of Auroville, in English, in *Auroville: A City for the Future* Harper Element 2017. This book maintains throughout a strong focus on spirituality. It doesn't tell us, however, that most of the first 40-odd settlers in Auroville (1966-68) were from Europe and North America, and had come there because of a dissatisfaction with the “rat-race” of careers in western civilization, and were looking for something more spiritual.

The very difficult problems

- The global population.
- Militarism.
- The increasing gap between very rich and poor.
- Advertising.

A glimmer of light on inequalities

- France's finance minister, Bruno Lemaire, moved toward taxing those who have been escaping tax. He started taxing digital companies at 3 percent c. 2017. They paid up. Other European nations have since followed suit, an indication of the necessary international cooperation.

Advertising's reform

- Here the debate has yet to begin!
- I challenge CACoR members to be the first to open this debate!

New ideas

- An entirely new basis for calculating profits tax on corporations, one that is fair to corporations.
- Public recognition that national, especially federal governments tend to be extravagant, and beginning a search to counteract that extravagance. (cont.)

New ideas (cont.)

- Retaining democracy, but with major systematic changes to get rid of the absurdities of party politics; or, in other words, to arrive at a science-based (or evidence-based) system that is not scientist-dominated either.

