

1) The microbiome has taken over

To cope with the vast toxic landscapes that resulted from industrialization and petrocultural lifestyles, the third and fourth decade of the 21st century witnessed a massive increase in research on microbiota and fungi that could decompose and process toxic petrochemical compounds. Eventually, the scientists were successful. Waters started to clean up again, even the contamination of the lower atmosphere could be significantly reduced with the help of a species of especially aggressive fungi attached to lightweight feathery material and blown into the air. But by the middle of the century, these new evolutionary strains of microbionts got out of hands. While the soil, the water, and the air got cleaner and cleaner—as clean as they hadn't been since the beginning of the industrial revolution—also those materials made of petrochemicals that had served an existential function in human society, e.g. plastics in medicine, couldn't be protected from being disassembled and eaten up. By the turn of the 22nd century, all synthetic materials based on carbon compounds had disappeared.

2) Extraction of the petrocultural past

A global ban on the excavation of fossil resources commissioned and enforced by a coalition between the US, China and a group of the formerly poorest countries in the global south, has led to a massive increase of research in recycling concepts and methods. The result was a shift in perspective that turned former dumpsites and highly polluted areas (the ones that hadn't been cleaned up, yet) into high potential excavation and extraction sites. Especially countries that for decades had ignored environmental questions either out of poverty or neglect are profiting from this turn.

3) Petronostalgia

As a reaction to a further increase of the pressures produced by effects of global warming: draughts, floods, water shortages and contaminations, epidemics, land losses, wars, and unseen migration dynamics as a direct result—the use of fossil fuels and all fossil-fuelled technology has been forbidden. Scientists and industry have not succeeded in producing an alternative energy source only approximately as powerful to keep up the petromodern living standards in terms of consumption and mobility patterns. The main emphasis of all efforts had to be laid on nutrition, housing, and health issues instead. The vast majority of the now unused machinery with combustion engines—cars, planes, generators, and the like—were decomposed and recycled. But the large infrastructures related to petromodernity—highway systems, power stations, petrochemical facilities, offshore rigs—have been mostly passed over to a vague future and been either reinterpreted by new uses that emerged over time or have become sites of petronostalgia.

4) Petromodernity reloaded

The end of the 2020s unexpectedly by most saw the return of cheap oil when a coalition of big corporations, the US president Trump who had just managed to run his fourth administration, and scientific advocates of the theory of abiotic oil formation managed to find new ways to produce vast amounts of petroleum with comparably little effort and environmental side effects. At the same time, geo-engineering had found solutions to get rid of carbon emissions by storing large quantities in the ground beneath the deep seas. By doing so, the increase of the greenhouse effect could be stopped and even reversed without applying significant changes to the energy use, production modes and global mobility patterns. Petromodernity not only continued, it began to thrive again. The metropolitan area of NYC is now part of a 200 million hypercity agglomeration ranging from Portland/ME to Richmond/VA. There is never-ending traffic on the ground, underneath and in the air, which is subdivided into different strata and corridors for local, regional, and interregional travel. According to the numbers—the wealth and well-being of the people are still measured by their consumption levels as is the wealth and well-being of societies and economies by stock indexes—the US is doing best in the world and better than at any time before. At the same time, there is a massive return of other 20th century problems that are related to the successes of the human species, terrorism, and overpopulation being the most prevalent. And a couple of signs are indicating that the vast subterranean carbon deposits as well as other storage sites for highly toxic materials have not been designed to last forever, but are already starting to release their dangerous loads.