

Best of Drawdown: Some Ways We Can Reverse Global Warming

First set: Solutions that build healthy soil and thus store more water and carbon in the ground, moderate the microclimate, grow healthy plants that make more oxygen, and reduce erosion

- (1) No tilling: clip weeds and crops at ground level, and leave roots & soil in place.
- (2) Compost everything (aerobically) that can boost soil health. [This also keeps organic material out of (anaerobic) landfills, a second-set solution.]
- (3) Grow good soil in more places:
 - within porous paving, including on lots, alleys, driveways, and parts of playgrounds
 - within garden boxes acting as schoolyard projects, parking lot curbs, little free food stands, alley beautifiers, protectors of walkers & bikers, &c.
 - on green, "living" roofs
- (4) Protect Forests
- (5) Protect Coastal Wetlands: allow meadows of sea-grass to sequester CO₂ and buffer us from waves, even as they migrate inland
- (6) Silvo-pasture: intermingling of trees and livestock
- (7) Managed grazing: avoid over-grazing and under-grazing, both of which hurt soil
- (8) Other elements (besides #'s 6 and 7) of Regenerative /Conservation agriculture: Use diverse cover crops, multiple crop rotations, and no poisons.
- (9) Drip irrigation
- (10) Grow Bamboo: it's FAST to sequester CO₂, strong as steel & concrete, & able to thrive on degraded soil
- (11) Traditional indigenous land-management practices (home gardens, pastoralism, agroforestry, fire management, communal forest management...)
- (12) Multi-story reforestation (plant diverse species of multiple heights together)

Second set: solutions that reduce the POTENCY of the green-house gases we put into atmosphere. Carbon dioxide (CO₂) is an abundant greenhouse gas, and methane is up to 34 times more potent than CO₂.

- (13) Methane digesters: decompose organic wastes in an anaerobic environment and collect the biogas to burn into CO₂ + water, and the digestant for fertilizer.
- (14) Landfill methane: burn the methane arising from the landfill into CO₂ + water before it escapes into the atmosphere as methane.
- (15) Refrigerant management: contain and chemically treat gases from older A/C and refrigeration units, and replace units with those that use less potent gases

Third set: Solutions that reduce the AMOUNTS of greenhouse gases we put into atmosphere by SUBSTITUTING clean-source electricity for fuel-burning

- (16) Distributed Solar, with some of its storage in e-vehicle batteries
- (17) Distributed Wind, with some of its energy storage in water pumped upward
- (18) Electric vehicles including cars, bikes, tractors, buses, charged by solar/wind

Fourth Set: Solutions that reduce the AMOUNTS of greenhouse gases we put into atmosphere by WISE USE of our resources (efficiency, conservation, making a little go a long way)

- (19) Reduce imports and exports and thereby spend less energy transporting things.
- (20) Buy less, but borrow & share.
- (21) Use Insulation on people (sweaters, hats etc.) and buildings.
- (22) Build/retrofit Zero-Energy Buildings, Zero-Water Buildings, Living Buildings, & buildings meeting the "2030 Challenge."
- (23) Eat food that is mostly local, made mostly of plants and free-range animal products.
- (24) Reduce travel, especially by plane, with or without using tele-health & tele-work as substitutes or rewards for infrequent flying, etc. as motivators.
- (25) Boost walkability in towns, between towns, and through forests and farms, by maintaining safe routes and new & old rights-of-way.
- (26) Boost bike-/trike-/stroller-ability of neighborhoods.
- (27) Boost occupancy of vehicles (for example by using Uber Pool, Lyft Line, BlaBla Car, other dispatcher-or smartphone-assisted ridesharing, traffic-guard-style carpooling).
- (28) Expand Public Transit and its connections to hubs.
- (29) Re-use, Repair, Upcycle, Recycle Close To Home:
choose high-post-consumer content paper; separate the waste streams; welcome industries that mine nothing but trash piles; enact Extended Producer Responsibility policies; teach children to mend cloth and work with metal.
- (30) Make better plastics such as bio-& recycled, not from newly mined fossils.

Fifth set: Solutions that Mostly Mitigate

- (31) Collect rainwater on every roof and store water at least on every block, if not at every building.
- (32) Even in buildings that are not Water Net Zero, use water-saving devices, policies and habits.
- (33) Move people up and out of harbors and other low-lying areas for their safety as oceans rise and heavier storms bring wilder waves and more erosion.
- (34) Increase the setback between buildings/new roads and riverbanks/ocean cliffs.
- (35) Build businesses and other groups to assist landowners to create fire-defensible space while also building soil. Build porous-paved fire-truck driveways in lawns and let grass grow through.
- (36) Assist people to prepare and maintain "go-bags," first aid kits, escape routes and trails.
- (37) Identify high-altitude points between every two rivers and equip them as flood refuges and windmill sites.
- (38) Decentralize all resources so that climate refugees can pitch in, help and share rather than organize take-overs.

The above list is made up of my personal favorites from a variety of sources, most notably the book [Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming](#) edited by Paul Hawken, Penguin Books, New York 2017. In order to become a favorite of mine it had to be something that people in Mendocino County could work on without sacrificing their health.

--Jennifer Kreger