

The Birth of Hydrogen Energy in Maine: What's Next?

During the next five years, the existing projects below will progress and gain more visibility. We will see:

- Design for Hydrogen workshops based on the Chewonki Renewable Hydrogen Project that will bring a technical how-to message to architects, engineers, HVAC specialists, trades-people and local officials.
- New companies like Maine Renewable Hydrogen LLC beginning to manufacture hydrogen from wind and solar for sale to MaineOxy and its commercial customers and perhaps to industrial users like Fairchild SemiConductor. Direct solar to hydrogen technologies from Massachusetts companies like Nanoptek and Konarka will likely be part of their efforts.
- Richard Kelley at Marine Propulsion Systems designing more efficient fuel cells and making them part of Maine's yachting scene.
- Scott Christianson at the Fractionation Development Center converting biomass to make everything from bio-diesel to perfume to hydrogen
- New hydrogen internal combustion engines from companies like Harpswell's Warp Drive Engines for stationary and marine applications.

Beyond these easily predictable results, it is also quite feasible that in the same time frame we will also see:

- Maine Clean Cities and Portland METRO working to add Maine-made renewable hydrogen to the natural gas powered busses recently added to METRO's fleet, further reducing emissions and extending engine life.
- Jim Sysko bringing the Gorlov water flow turbine technology back to Maine in hydrogen assisted renewable power projects.
- Maine's plastics industry making plastic electrodes and electrolyser body assemblies to reduce the price tag for hydrogen systems dramatically.
- Large distribution centers replacing batteries in their forklifts with fuel cells, reducing the time employees spend changing batteries and improving fork lift performance.
- Maine's National Guard troops wearing fuel cells rather than batteries, reducing the weight of the portable power systems for their electronics by about 70%.
- Bath Iron Works installing fuel cell systems onboard their ships, to provide distributed power for critical equipment, independent of the ship's main power station.