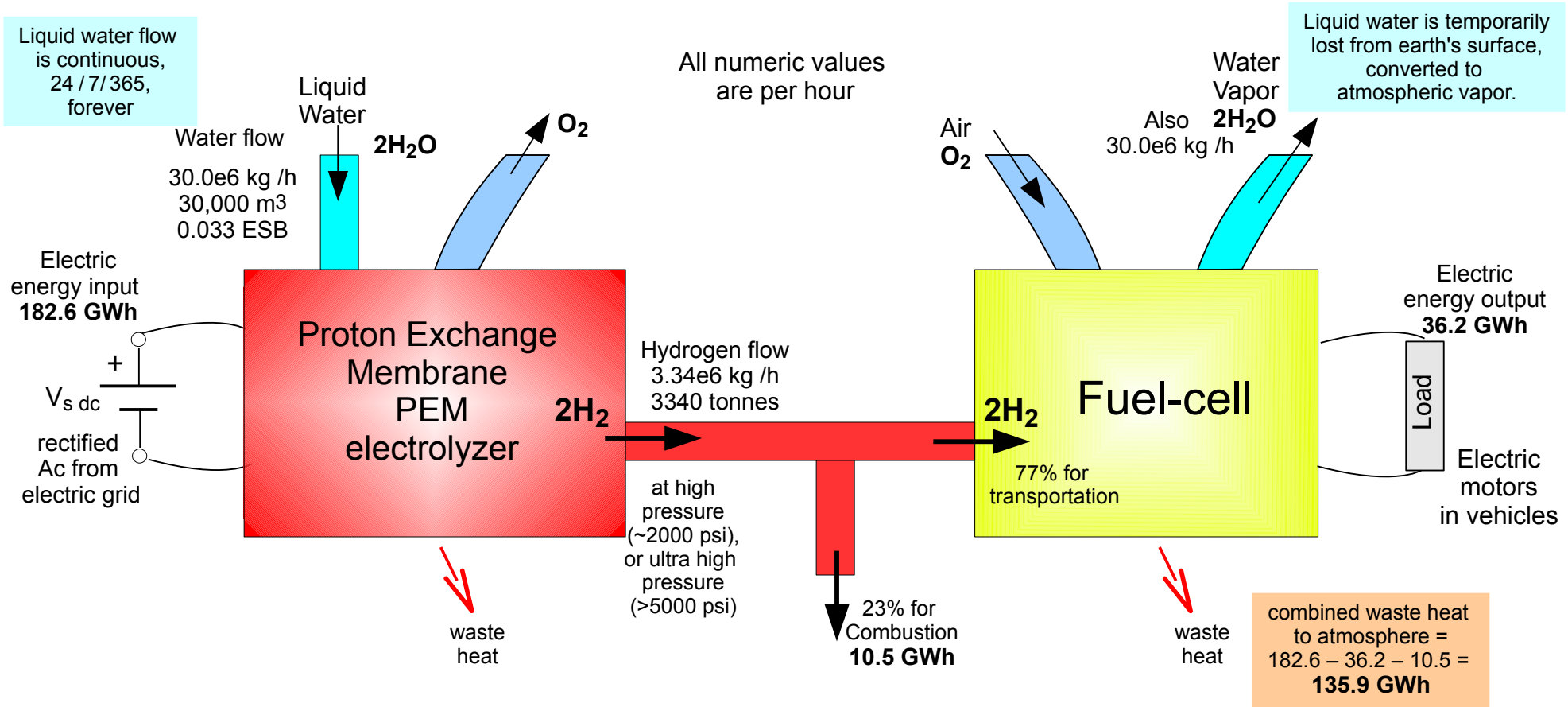
The 100% WWS Plan diverts 11.48% of its electrical power, 182.6 GW, to hydrogen production.
It proposes using about 77% of that hydrogen for fuel-cell transport and 23% for industrial process combustion.



If 100% of the hydrogen were sent to fuel-cells the electrical output would be 0.256 X 182.6 GW = 46.75 GW electric.
In the proposed 77% /23% split we would obtain 0.7744 X 46.75 = 36.2 GW electric, and 0.225 X 46.75 = 10.5 GW process heat.
If all the process heat could be utilized for industrial product with none lost to the surroundings,
the overall waste heat of the Plan's entire hydrogen system would be 182.6 – 46.75 = 135.9 GW.
Of that, 0.7744 X 135.9 GW = 105.2 GW is caused by the trucks' fuel-cell propulsion.

Assumptions for this diagram:
The fuel-cell's chemical-to-electrical conversion efficiency = 42%. This is typical for large-capacity units of >50 kW rating.
The PEM electrolyzer's electrical-to-chemical conversion efficiency = 61%. This is typical for large-capacity units, 50 tonnes H_2 /day.
The overall electrolyzer /fuel-cell system's electric-to-electric conversion efficiency = 25.6%. [0.61 X 0.42 = 0.256]
Such poor efficiency is the notorious weakness of the “hydrogen economy” idea.

100% WWS Plan's hydrogen policy