The ALL Power Labs CharTainer is a compact, high-volume, Combined Heat and Biochar (CHAB) pyrolizer system enclosed within a standard 20-foot shipping container. The system is fully automated and complete—from biomass hopper, gasifier-re-tort, and clean-burning flare with heat exchangers to biochar takeoff—all integrated within the shipping container envelope. The CharTainer uses a scaled-up version of APL’s newest Swirl Hearth architecture previously refined and proven in our PT150 PowerTainer.

The CharTainer is being developed to meet the ever-increasing demand for high-quality, high-temperature, electrically active biochar in the agronomy and climate/carbon mitigation sectors. Partnering with our carbon-drawdown initiative, The Local Carbon Network, APL’s engineers have been working with biologists, agronomists, farmers, and climate researchers to perfect biochar-retort technology and biochar application techniques. One result of this work is the design of the CharTainer, capable of a one quarter tonne of biomass per hour throughput delivering up to 40 kilograms per hour of the highest quality, tar-free, geo-conducting biochar available.

We are currently developing a pilot unit with CEC funding with the intent of commercial Production units being available as early as Q3 2021. We offer these data with reasonable confidence given our long-running data acquisition in the development of our gasifier-genset systems and distribution of their biochar byproduct.
ALL Power Labs is the global leader in small-scale gasification technology. We make biomass-fueled power generators that are ready for everyday work, to serve real-world, distributed-energy needs. Our compact gasifiers are now at work in over thirty countries, and support research at more than fifty universities around the world.

Our team is an unusual combination of hands-on fabricators and university-trained scientists and engineers. The result is a powerful combination of technical ability and physical know-how for developing innovative energy solutions.

ALL Power Labs makes machines that transform organic waste into useful Power and Products, for work at the intersection of industry, agriculture, and climate. APL intends to make a consequential impact on global energy poverty and greenhouse gas drawdown, through mass delivery of its carbon-negative energy devices.

Our facility is in Berkeley, California. Please contact us to arrange a visit the next time you are in the Bay Area. We would love to show you around.