



## Deer Park Community Advisory Council

**Monday, March 27, 2023**

### **Carbon Capture and Storage 101: Meeting 1**

University of Houston VP of Energy and Innovation Ramanan Krishnamoorti presented “Carbon Capture, Utilization and Sequestration” for the Deer Park Community Advisory Council. Carbon capture and storage is an underlying part of the energy transition currently underway in countries like the United States, Western Europe and Australia because human emissions of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases are driving climate change. Carbon Dioxide created as a result of industrial processes is the easiest to capture at the source because carbon emissions can be captured prior to its release into the atmosphere, and then sequestered in geological storage sites. Once concentrated amounts of CO<sub>2</sub> have been captured, it can be compressed and transported via pipeline, truck or railcar and injected and stored in underground geological formations. The ultimate goal is to be able capture CO<sub>2</sub> and then recycle, utilize or dispose of it in ways that are non-harming to the environment. Cost-effective utilization of CO<sub>2</sub> is still being researched. Today, the technology required to convert the CO<sub>2</sub> to usable products is still expensive and cost-prohibitive, which is why there is still a focus on storage.

Scott Castleman of Houston Carbon Capture & Storage (CCS) Alliance said that their mission is to help decarbonize the Houston area and make Houston the model for an emerging, lower-emission world that supports jobs, economic growth and prosperity. Deer Park and Texas is at ground zero of CCS technology. Texas has the geology for storage both onshore and offshore. Additionally, the industrial complexes in Deer Park and the Houston area have the ability to capture CO<sub>2</sub> in large enough amounts that can significantly reduce CO<sub>2</sub> emissions. CCS projects not only bring emission reductions and significant tax credits for industrial facilities, but can also add jobs for the region and \$100 million in potential investment opportunities.

DPCAC’s April 24 meeting will feature Shell Chemicals and Calpine sharing how they are implementing or planning to implement Carbon Capture and Storage at their facilities. Visitors are welcome! For an invitation, contact [info@deerparkcac.org](mailto:info@deerparkcac.org).

*Read about DPCAC meetings and see summaries of our most recent presentations at [www.deerparkcac.org](http://www.deerparkcac.org).*