

# Forest Carbon into Farmlands

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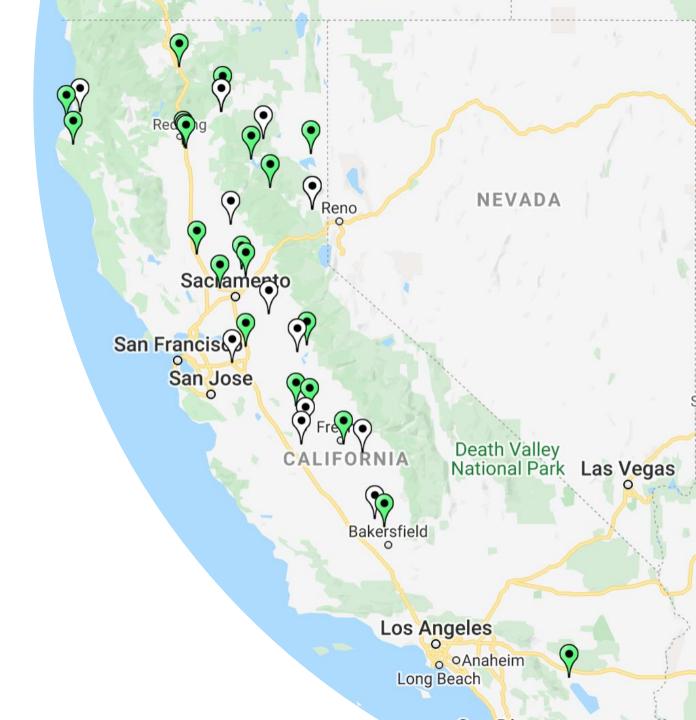








## ACTIVE AND IDLE BIOMASS POWER PLANTS IN CALIFORNIA





## Annual Outcomes, 2023



670,000 tons CO2 sequestered



25,000 acres of farmland amended



700M gallons of water reservoir in soil



### Climate Change and Land

An IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems

#### Summary for Policymakers











#### 2019 Refinement to the **2006 IPCC Guidelines for National Greenhouse Gas Inventories**

#### Volume 4

#### **Agriculture, Forestry** and Other Land Use

Edited by Calvo Buendia, E., Tanabe, K., Kranjc, A., Baasansuren, J., Fukuda, M., Ngarize S., Osako, A., Pyrozhenko, Y., Shermanau, P. and Federici, S.



Task Force on National Greenhouse Gas Inventories





## **Current Methodologies**

2019 Refinement to the 2006
IPCC Guidelines for National
Greenhouse Gas Inventories

Puro methodology

European Biochar Certification,
C-Sink guidelines











#### PACIFIC BIOCHAR 2020

This C-sink portfolio is based on applications of biochar in agriculture and landscaping in California and Oregon. Th...

Amount sold

5.00/74.73tCO<sub>2</sub>e

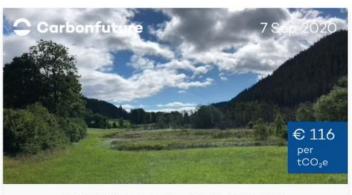


#### BIOCHAR Q4 2020

This C-sink portfolio is based on applications of biochar in agriculture in Germany and Austria. The biochar was ...

Amount sold

111.00/163.62tCO₂e



#### BIOCHAR Q3 2020

This C-sink portfolio is based on applications of EBC certified biochar in agriculture in Germany and Austria. This ...

Amount sold

D 102.19/111.06tCO₂e







The innovative C-sink credit offers for the first time full verifiable life cycle tracking of C-sinks. The credit also guarantees proper recognition of C-sink duration based on the most rigorous standard available. For more details, visit <a href="https://carbonfuture.earth">https://carbonfuture.earth</a>.

The EBC certificate quantifies the C-sink potential of biochar at production site:

- All emissions in the process of biochar production, including energy related emissions and potential methane emissions, are deducted from the C-sink potential
- The biochar as a material is EBC-certified and accordingly non-hazardous
- Soil applications of biochar ensure that the respective carbon is stored safely; this includes both direct and indirect soil applications like additive to compost, to anaerobic digestion, to animal feed or to bedding of farm animals; this is because biochar that is applied to soil cannot be removed and burned

On top of the EBC certificate, Carbonfuture documents transportation and application of biochar:

- Each individual delivery of biochar to end users (e.g., farmers) is documented in a tamper-proof and completely auditable manner on our blockchain platform, including the link to the (EBC-)production certificate of the biochar producer
- Emissions related to transportation and (if applicable) post-production processing are deducted from the C-sink potential
- A conservative degradation rate of 0.3% annually is assumed for the residual biochar in soil
- Carbonfuture C-sink credits finance the long-term removal of 1 t CO2 equivalent from the atmosphere over 100 years
- Although degradation of biochar in soil is considerably lower than the residence time of CO2 in the atmosphere, we initially sequester 1.16 t CO2 equivalent in order to ensure the sequestration of 1 t over 100 years on average. This standard is far more rigorous than currently established and renowned standards. If you balance your emissions in this manner, you are climate positive.



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## To Leave a Legacy of Fertile Soil

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