

My Healthy Soils Project

Transition Town Vincent's My Healthy Soils Project aims to empower local residents to transform their yards and courtyards to capture carbon into the soil to support plant growth to create a cooler, healthier and more sustainable environment. We focus on supporting the addition of locally available organics (e.g. biochar, compost, worm castings/juice and



microbes) to improve the carbon, nutrients and water holding capacity of your soil. This project is a pilot to evaluate the potential for residents to increase soil organic carbon (SOC), while providing other benefits such as reducing organic waste, improving soil and plant health, improving water use efficiency and increasing vegetation cover.

There are three primary components of soil organic carbon (SOC)(DPIRD, 2022)¹:

- Charcoal/biochar i.e. resistant organic carbon which can persist in the soil for 100's to 1,000's of years
- Compost i.e. humus which can take 10's to 100's of years to degrade
- Fresh or decomposing organisms including plant and animal matter i.e. particulate carbon which can persist for 2 to 50 years

The benefits associated with transforming the urban environment into a carbon sink using locally available resources is huge. Soil and vegetation are carbon sinks, with around two thirds of the land-based carbon pool sequestered in soil (<u>ASOE</u>), 2021)². Clearing, draining, developing and paving land for urban uses have resulted in the loss of significant amounts of carbon and destruction of the natural physical, chemical and biological processes which regenerate the soil.

Resources for producing carbon include food scraps and wood biomass such as trees pruning and wood chip which are available at or near most homes. Particulate carbon can generally be obtained from locations such as bushland or community gardens. There are established tools for making compost and worm castings/juice and the project has already identified a number of tools which can be used in the residential environment for making biochar. By making soil improvers locally, the significant costs associated with buying and transporting materials such as fertiliser and water to and from residences can also be avoided.

My Healthy Soil Project activities will run through 2025/2026. To get involved visit <u>https://transitionaustralia.net/projects/my-healthy-soils/</u> or contact Ian Kininmonth E: <u>ian.kininmonth@ttv.org.au</u> M: 0401 521 895.

¹ Edwards, T. (2022) What is soil organic carbon? Department of Primary Industries and Regional Development (DPIRD).

² Australian Government (2021) State of the Environment Report – Carbon. DCCEEW.