Circular food systems for a resilient Melbourne foodbowl
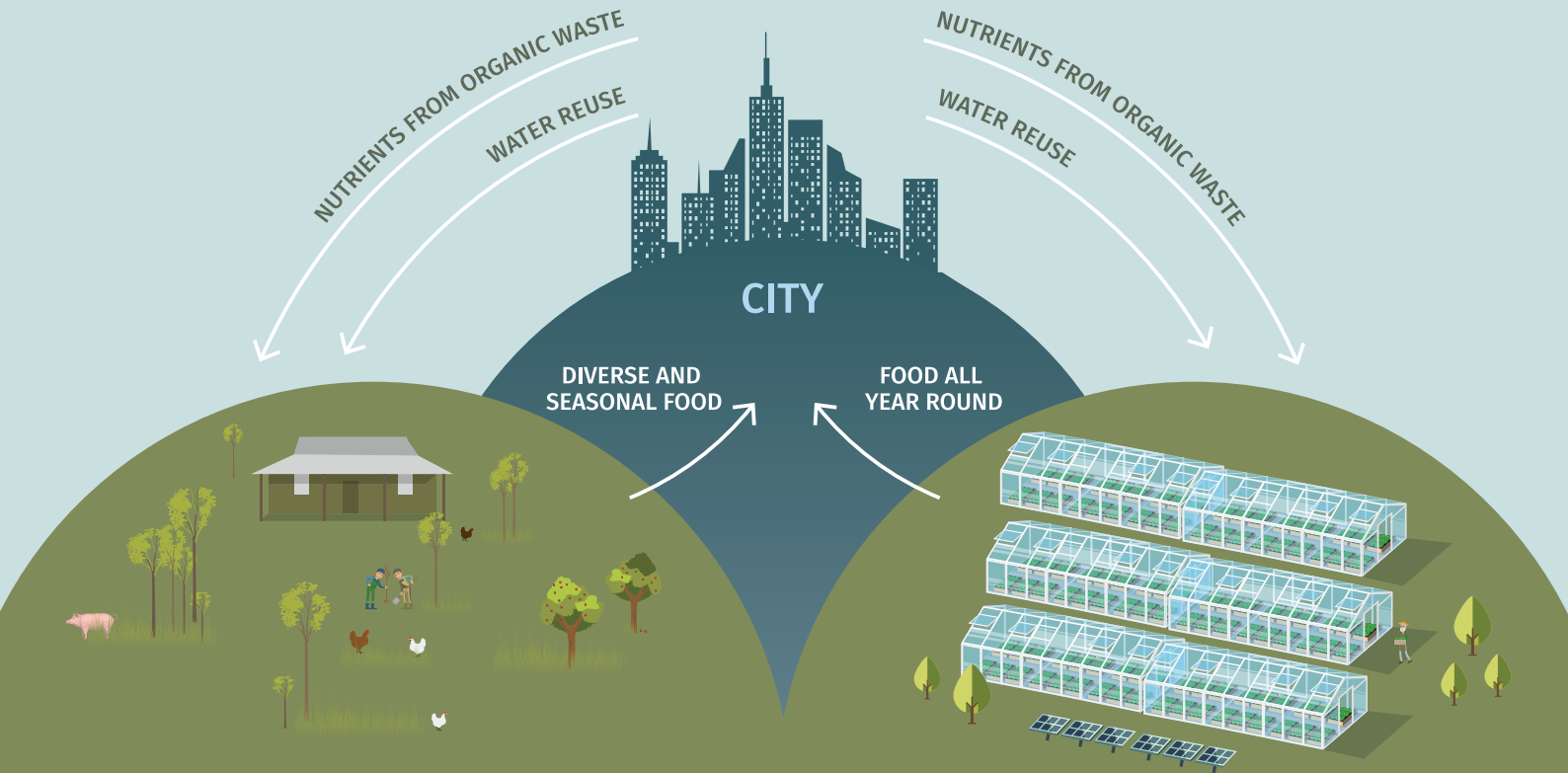
Recycling water and nutrients on city fringe farms to strengthen Melbourne's food system

LORD MAYOR'S CHARITABLE FOUNDATION

THE UNIVERSITY OF MELBOURNE

NUTRIENTS FROM ORGANIC WASTE

WATER REUSE

NUTRIENTS FROM ORGANIC WASTE

WATER REUSE

CITY

DIVERSE AND SEASONAL FOOD

FOOD ALL YEAR ROUND

Regenerative agriculture

Produces food while actively regenerating ecosystems

Combines cropping, animals and trees to build soil, cycle nutrients, sequester carbon and improve biodiversity

Builds soils through continuous ground cover, perennial plants, crop rotation and rotational grazing

Produces diverse nutritious foods, along with other useful products (like timber and energy)

City organic and food waste becomes compost and biofertilisers which build soils

Rainfall is stored in soils, groundwater and vegetation to build reservoirs for drought

City stormwater is treated and stored, then used on farm

Protected closed-loop agriculture

Continuous year-round production of fresh foods for the city

Crops are protected from extreme weather conditions

Renewable energy from solar or wind powers climate-controlled greenhouses

A high level of control enables efficient use of natural resources and maximises yields

Liquid fertilisers use nutrients from city waste (like phosphorous and nitrogen) to replace synthetic fertilisers

Recycled wastewater from the city is circulated in a closed system for efficient crop irrigation

research.unimelb.edu.au/foodprint-melbourne