



# CIRCULAR COMMUNITY

SCG'S SUNSET DRIVE

27 April 2023

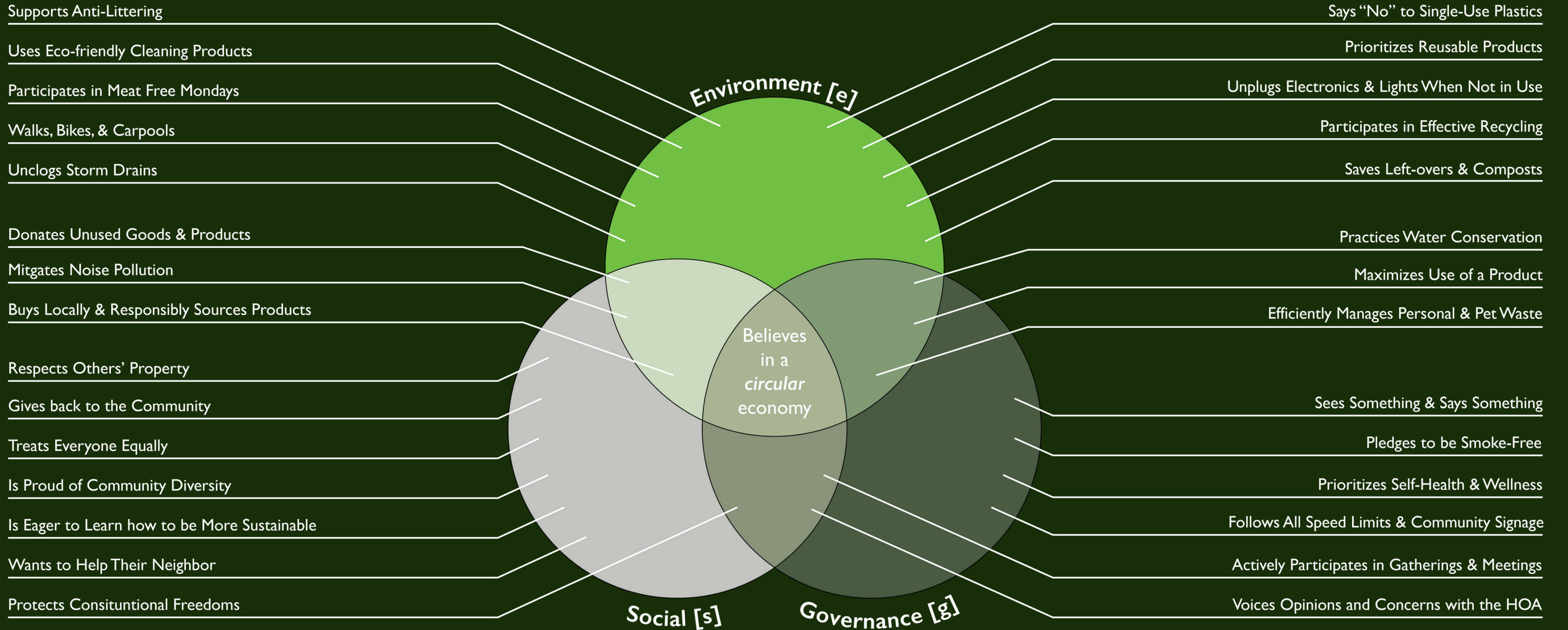


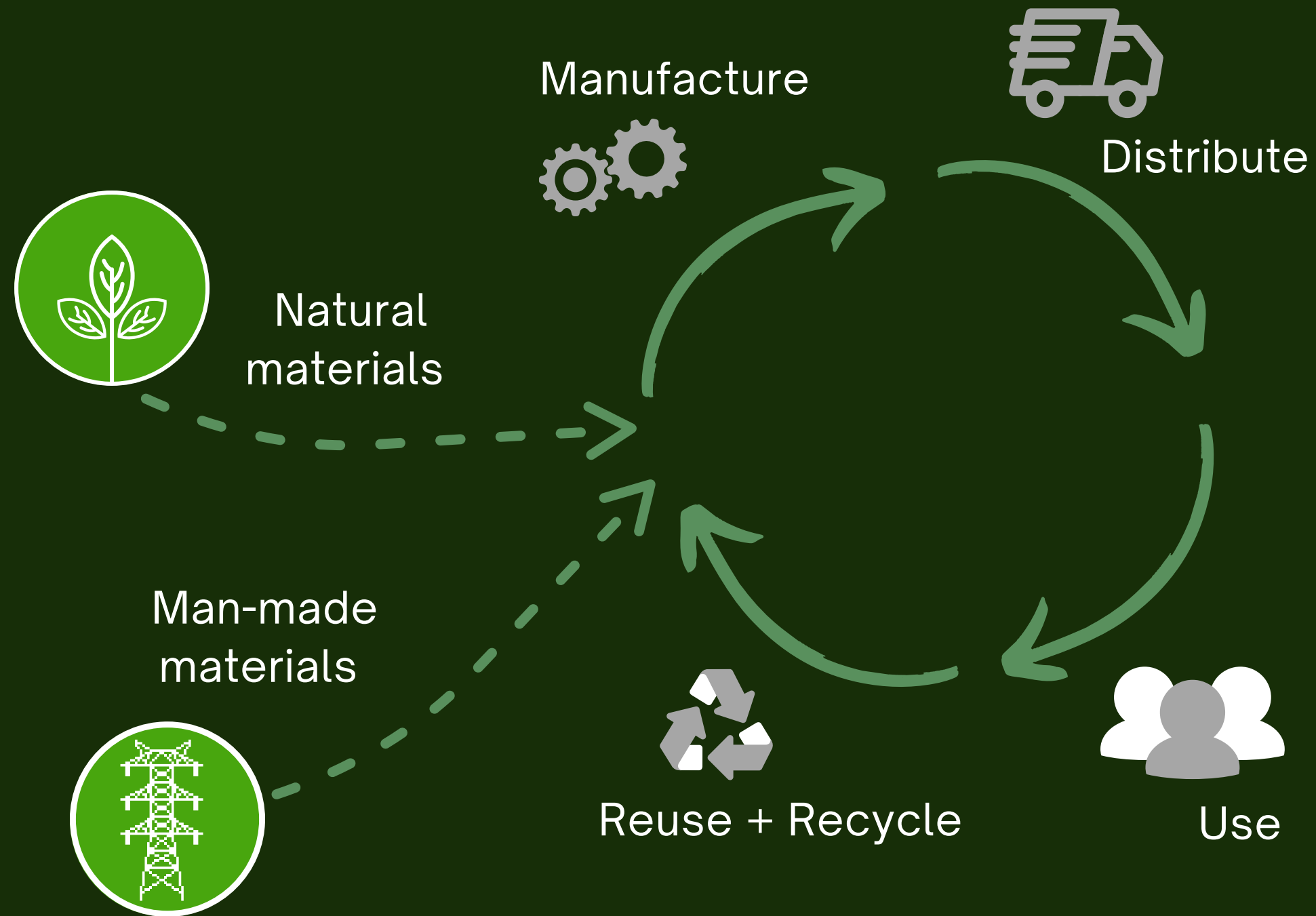
# SUNSET DRIVE - *a community that...*

- Believes in a Circular Economy
- Cares for the Environment
- Is Socially Responsible
- Promotes Self Governance



# SUNSET DRIVE - *a community that...*





CIRCULARITY

# WHAT IS A *CIRCULAR* ECONOMY?

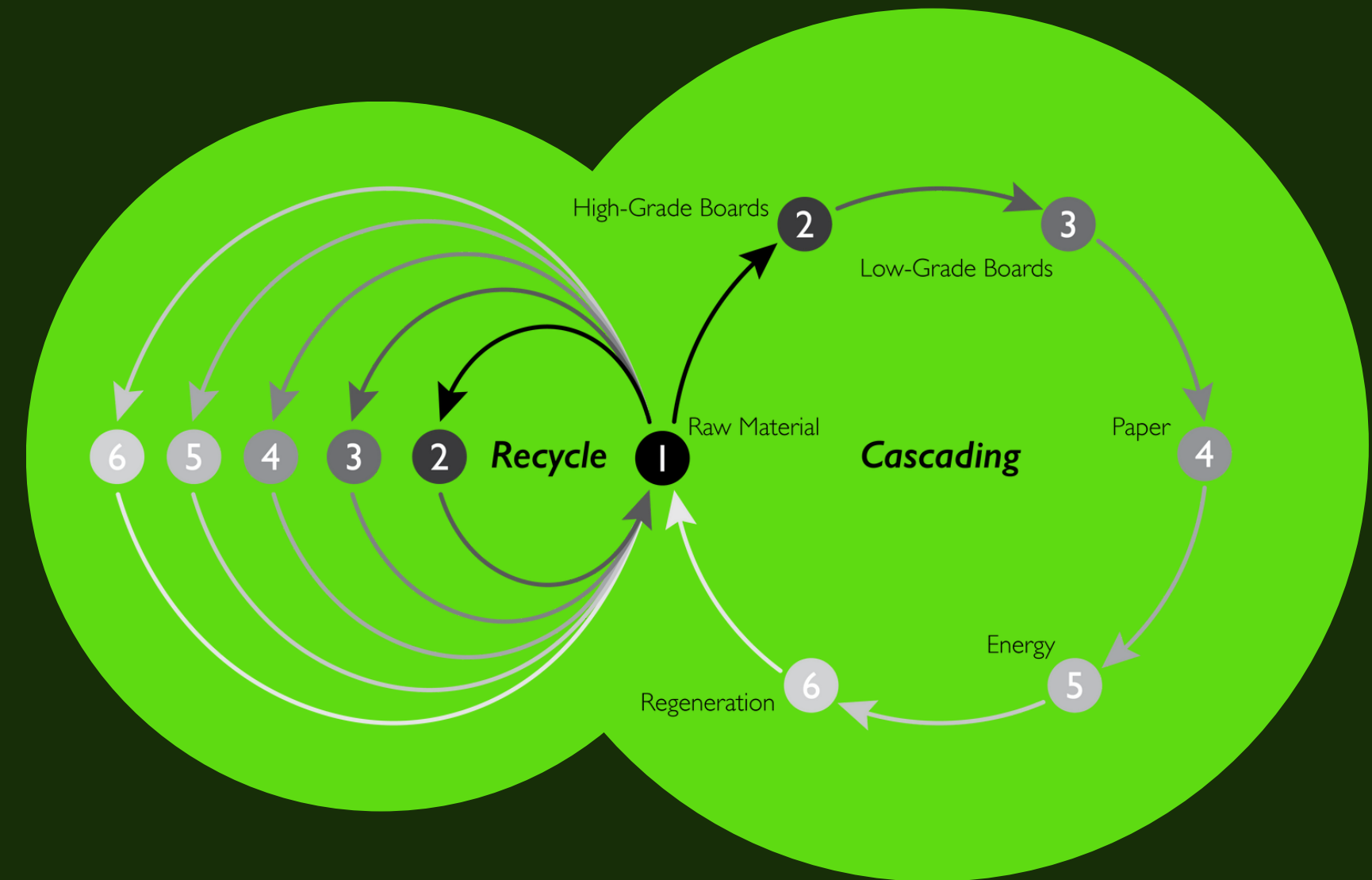
- Using waste in a productive way
  - Renewables vs. finite materials
- Economically sustainable
  - Materials that will last longer and ultimately save money

CASCADING AND REGENERATION

# NATURAL CYCLE

## Recycling vs. Cascading Process of Wood

- Maximizing use of Material
  - A regenerative lifecycle
  - Produces lower quality products from higher ones
- Economically sustainable
  - Less raw material will be used in production of goods

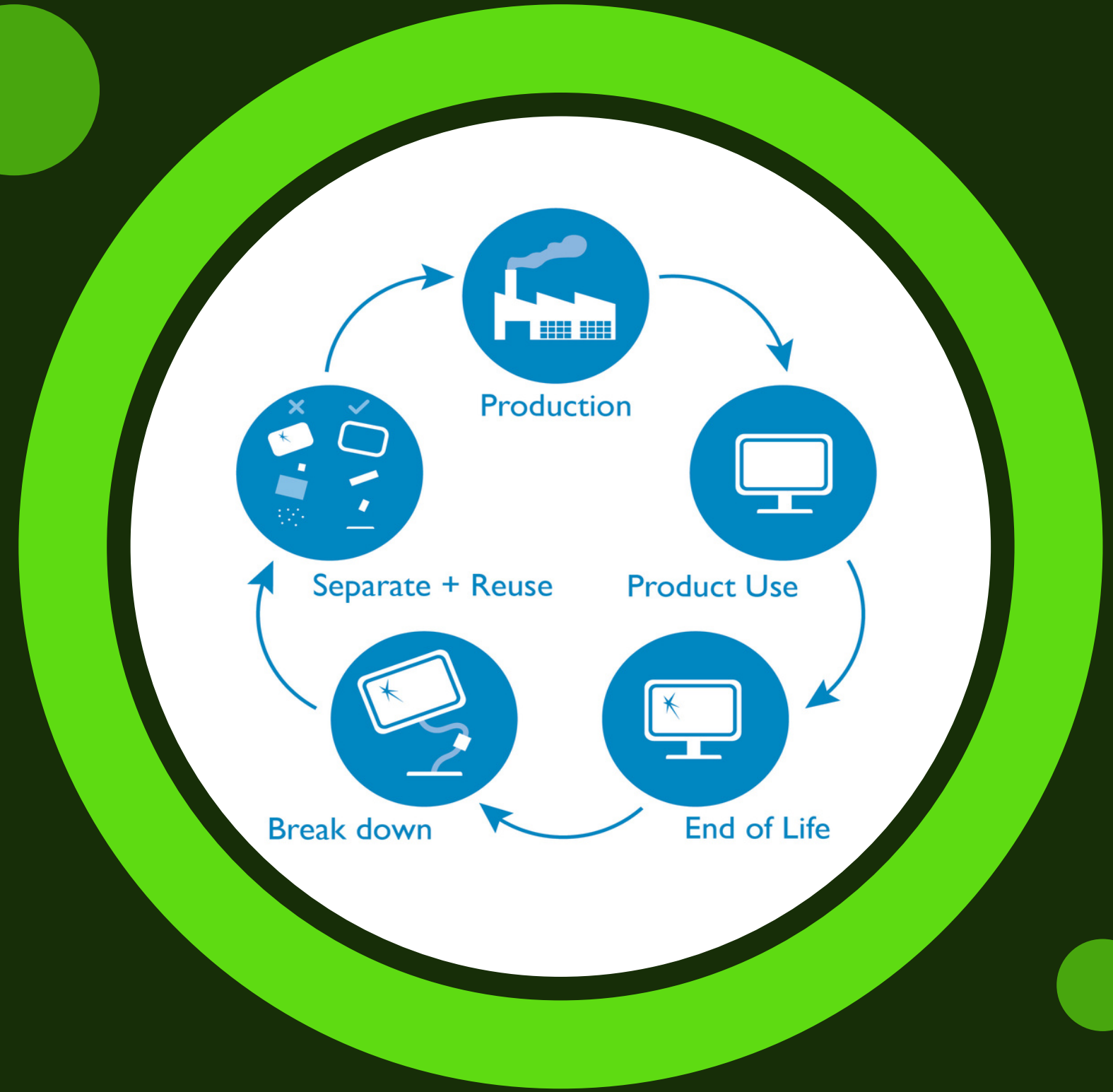


NON-BIODEGRADABLE

# MAN-MADE CYCLE

## Description Here

- Reusing finite resources
  - If not reused, value is entirely lost
- Up-cycling products + materials
  - Only discards broken pieces and reincorporates those that are still able to produce work



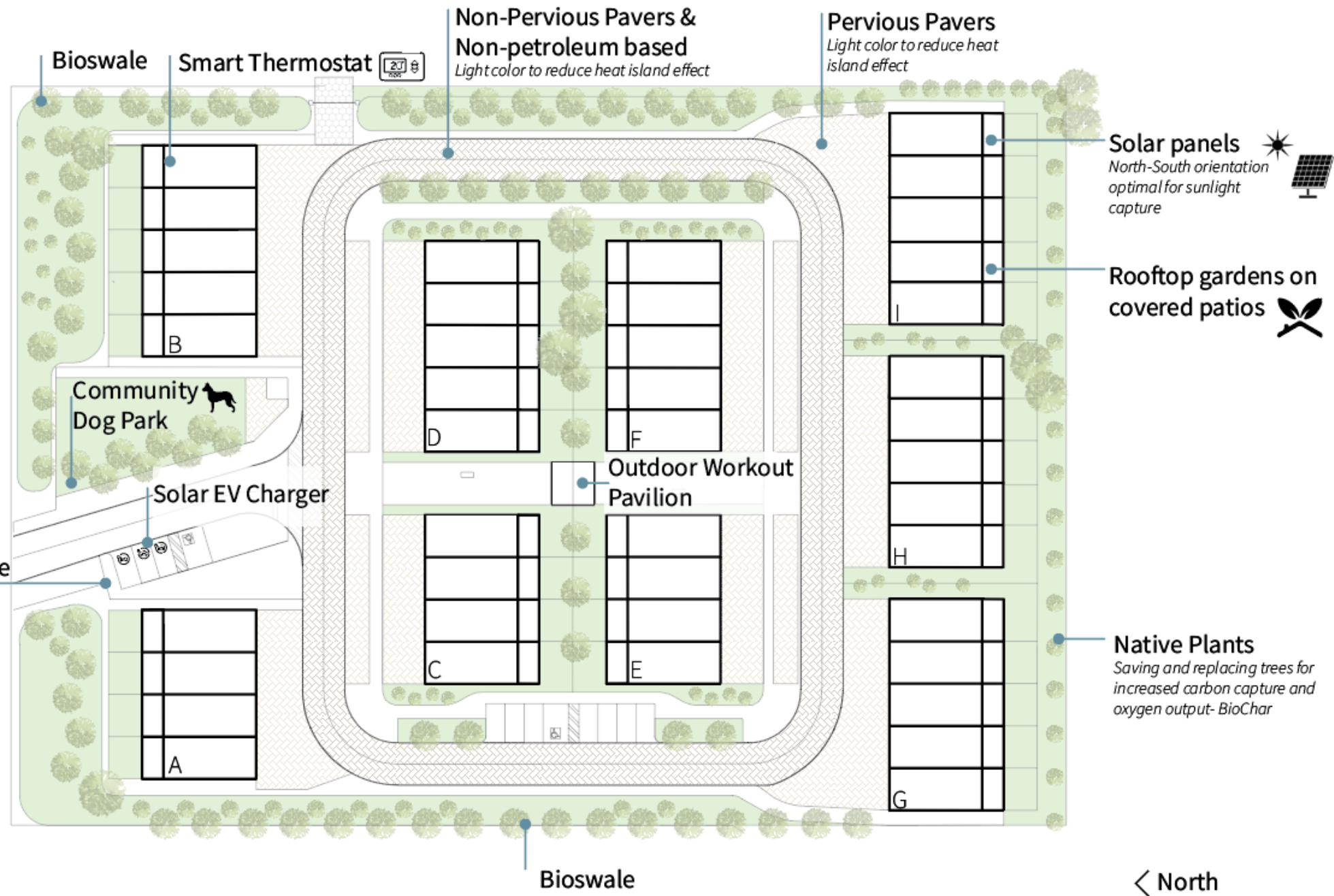


LAKE WORTH, FL

# COMMUNITY INCLUSION

- Suburban Sprawl
- Accessibility
- Community Amenities
  - Plan to introduce public amenities into community
    - Not only for Sunset Drive residents, but for the entire Lake Worth community

Sunset Drive



AN SCG COMMUNITY

# SUNSET DRIVE

- Net-zero Community
  - Solar powered electric vehicles
- Building Typology
  - 3 Bed / 2 Bath Townhomes
    - 42 units across 9 buildings
- Amenities
  - Promotes outdoor activities
  - Open to the entire Lake Worth neighborhood

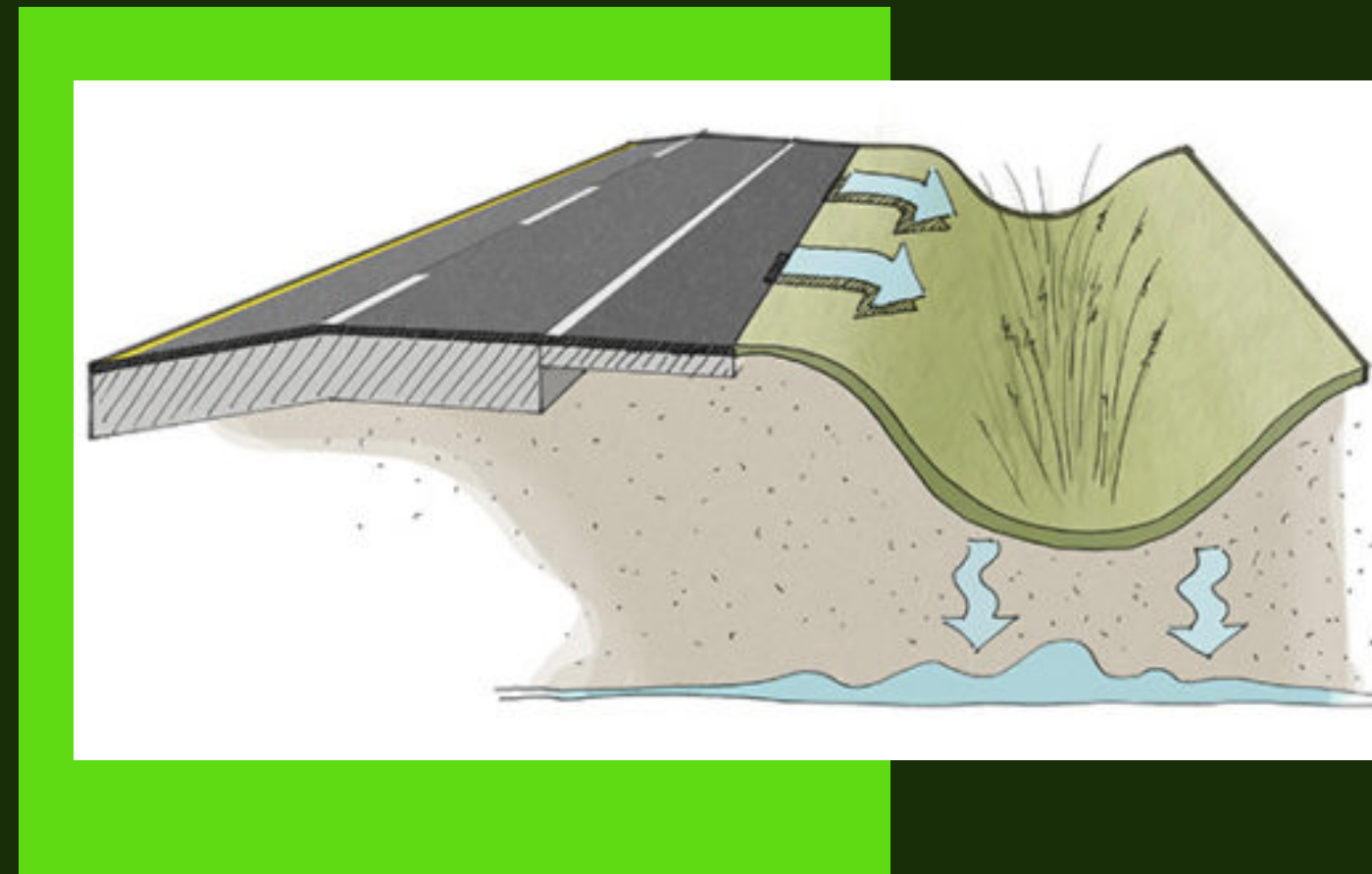
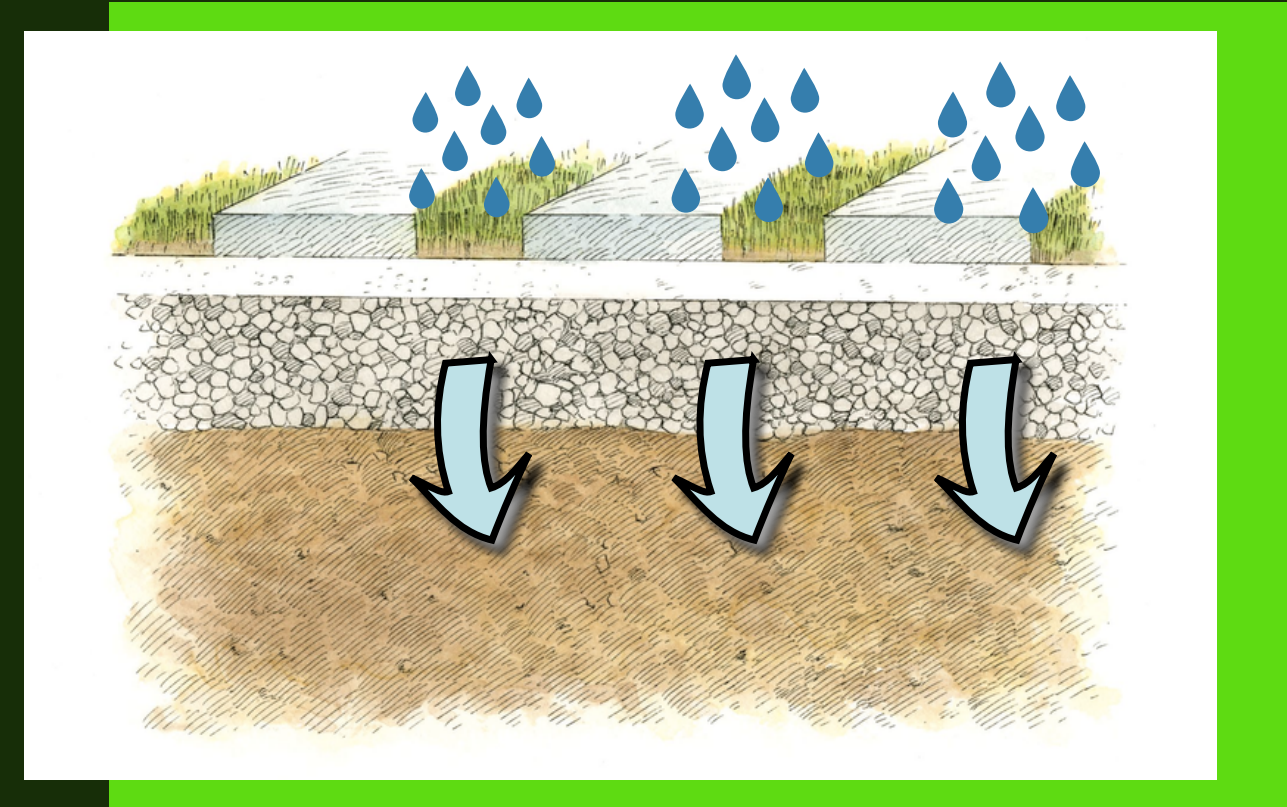




# SUSTAINABLE LANDSCAPING

**Bioswales** with native plants are a **cost-effective** and **natural** way to control flooding, reduce pollution, and recharge the Biscayne Aquifer.

Driveways are paved with **permeable pavers**, another **cost-effective** way to **reduce** flooding and **recharge** the Biscayne Aquifer.





# CARBON REDUCTION

Biochar is made from organic scraps and increases carbon retention in soil by **50%**.



Through **carbon sequestration**, trees can help intake and store carbon. Helping the trees grow and stay healthy can allow us to have a **net positive carbon footprint**.



POSSIBLE COMMUNITY  
GARDEN TYPOLOGIES

# GREEN SPACE

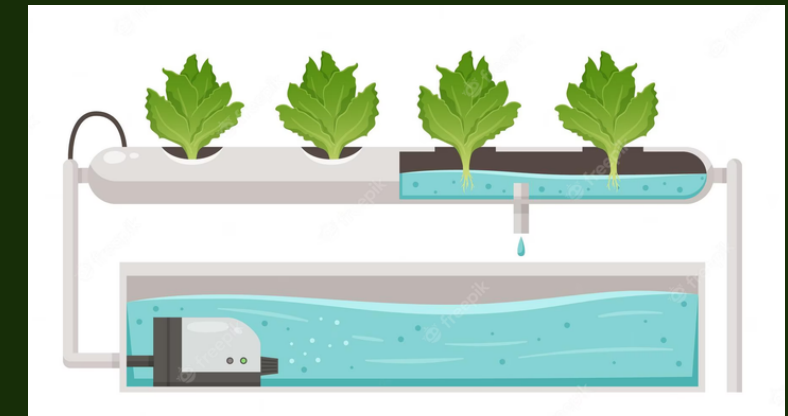


## Compost Garden

- **Expands** nutritional awareness
- Studies show a relationship with the environment can **improve** mental health
- Reduces grocery store visits
- Promotes community inclusion Lifestyle

## Lifestyle

- Gardening
  - Embedded roots **strengthens** soil
  - **Prevents** erosion
  - Uses **compost** as a fertilizer
  - **Reduces** weeds
- Opportunity for residents to connect with nature



## Hydroponic Garden

- Planted in PVC pipes
  - **Zero** soil use
  - Can be placed vertically
  - Requires **less** water than traditional gardening
  - **Prevents** soil erosion and chance of weeds

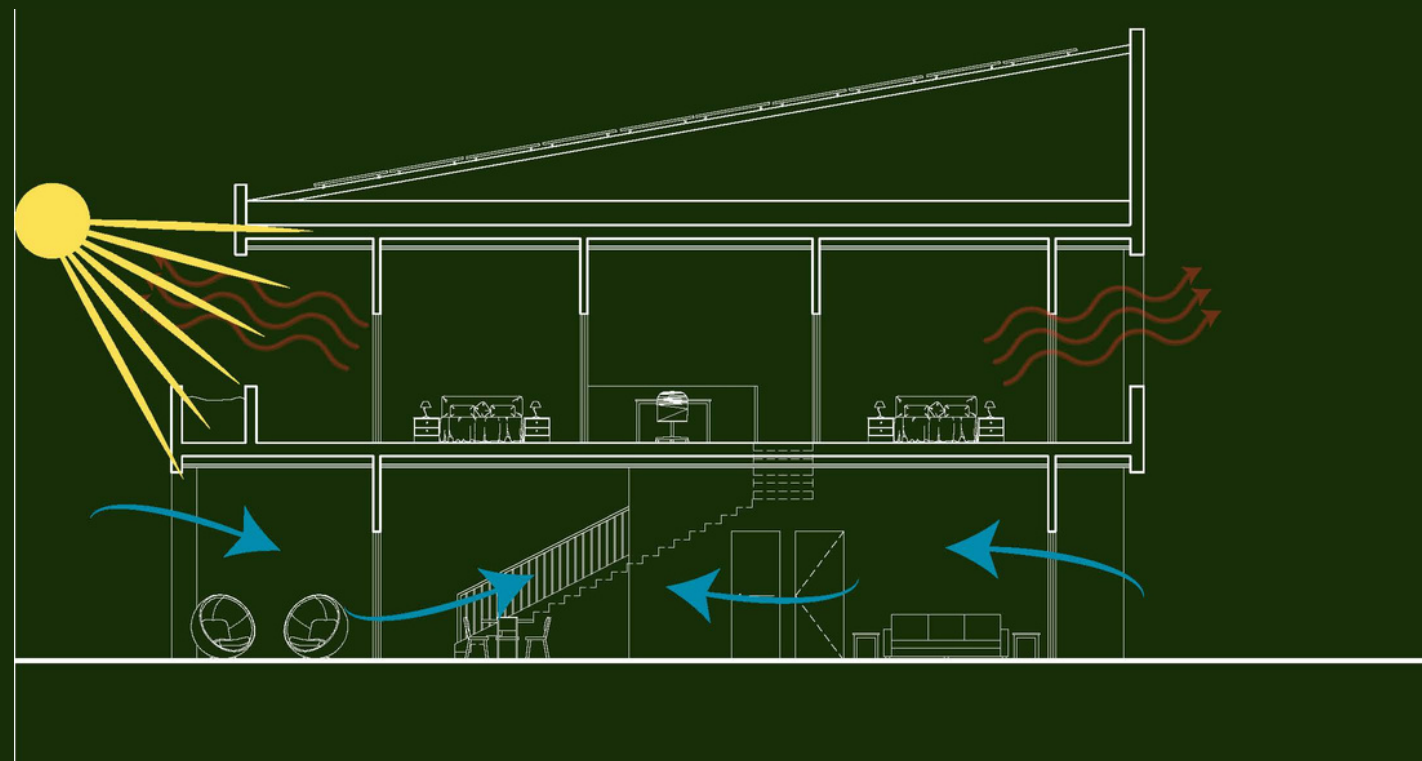


## TRANSPORTATION

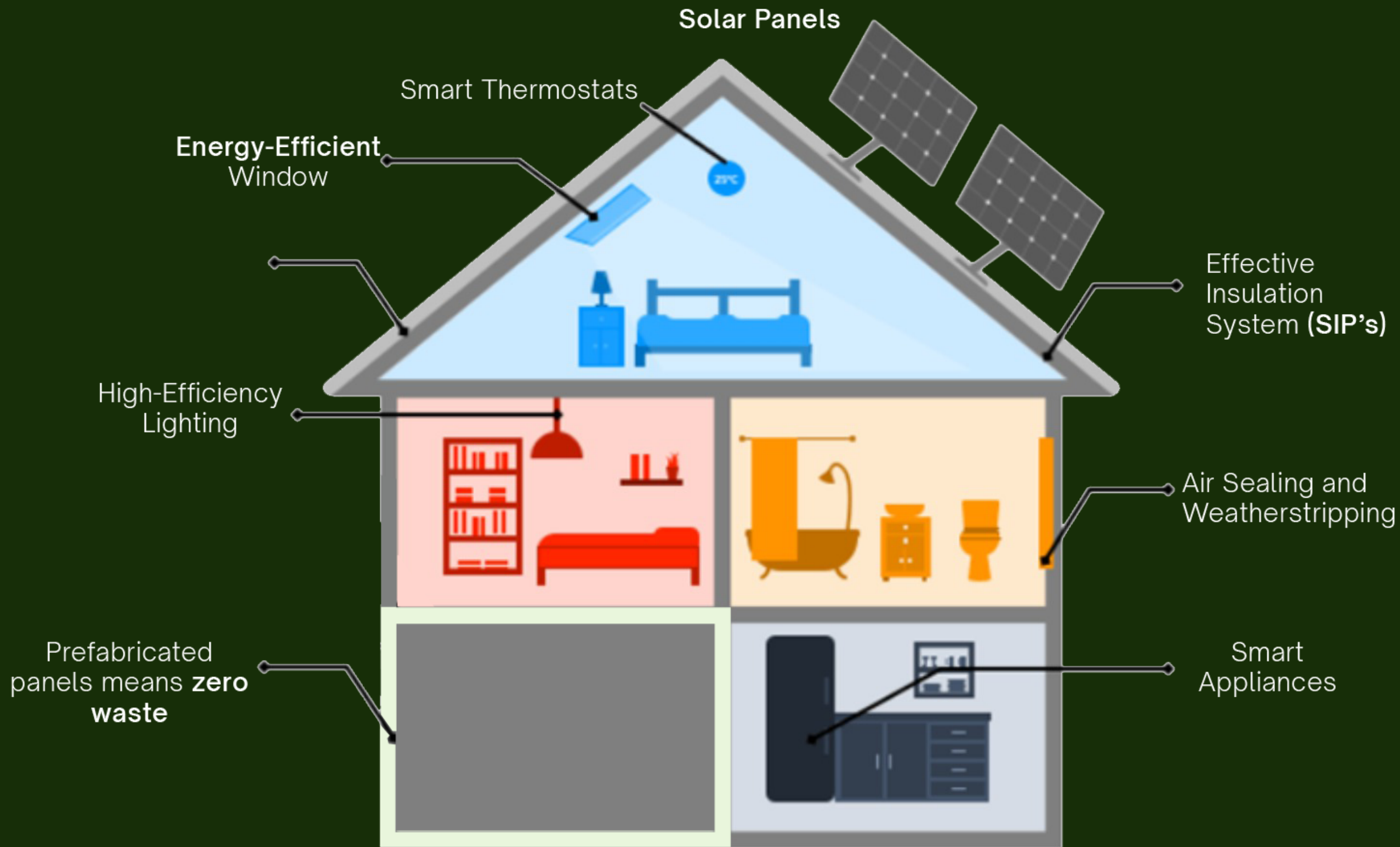
- **Partnering with Freebee**
  - Eco-friendly ride sharing company
- **All Electric Vehicles**
  - Reduces carbon footprint of entire community
- **Personal Freedom**
  - Allows residents to travel as required without the need of personal vehicles



# TYPICAL RESIDENCE



- **Site Orientation**
  - Optimal solar panel orientation & N/S glazing for shade
- **Building Typology**
  - Townhomes share internal walls = **less building material**
- **Unit Design**
  - Private green space + terraces
    - promotes well-being
  - Passive ventilation
    - reduction in necessary HVAC use
  - Smart technology
    - reduces use of electricity



# ENERGY EFFICIENT DESIGN

The result of using all of these approaches is a design system that is extremely **strong, energy-efficient** and **cost-effective**.



# STEEL

is climate resilient and recyclable.

Resistant to deterioration, decreases reparation, and maintenance costs.

Compared to...

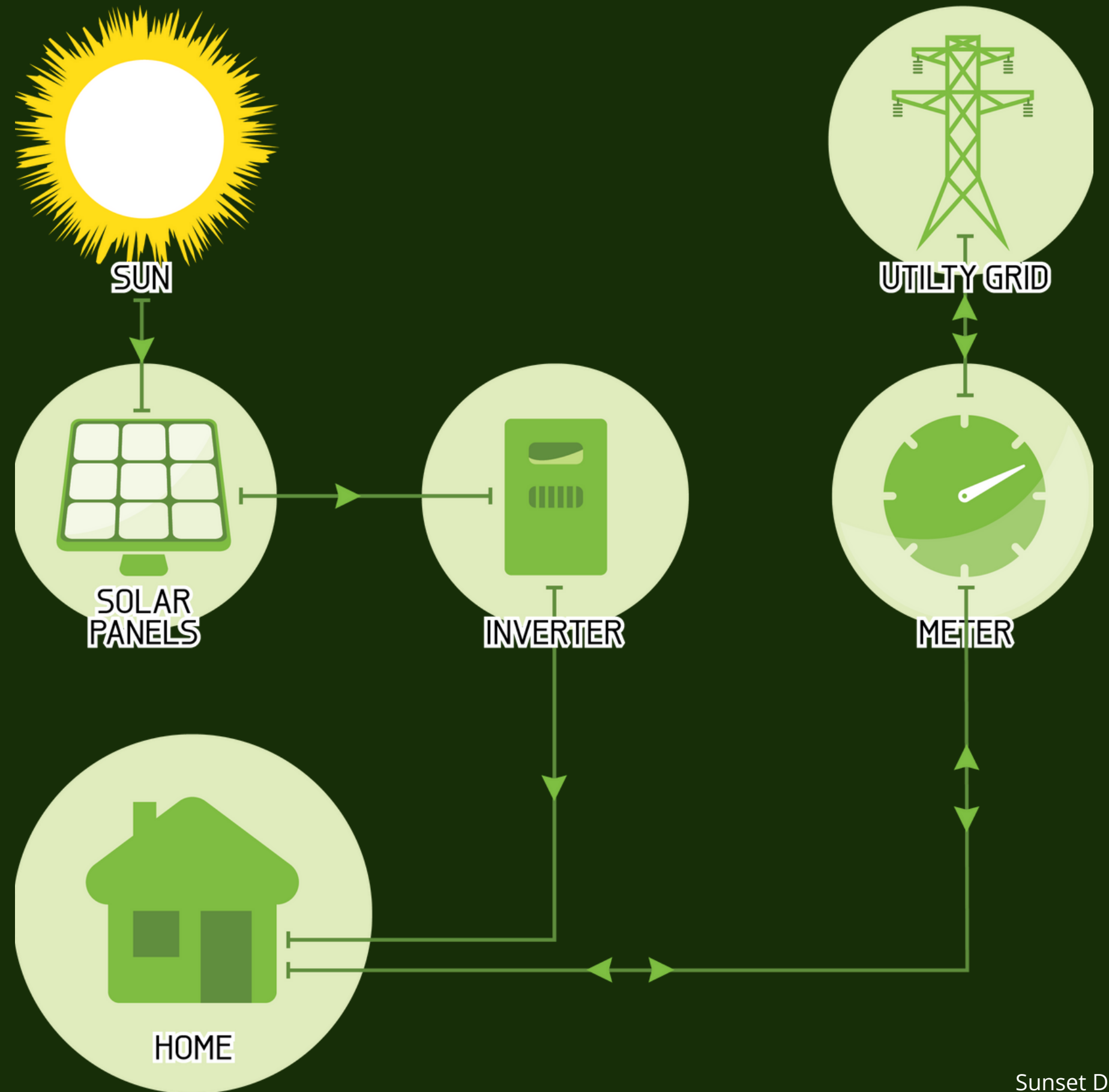




# NET ZERO ENERGY

A **grid-connected system** allows you to power your home with **renewable energy**, and any excess electricity produced **is fed back into the grid**.

When renewable resources are unavailable, electricity from the grid supplies your needs.







# WATER CONSERVATION

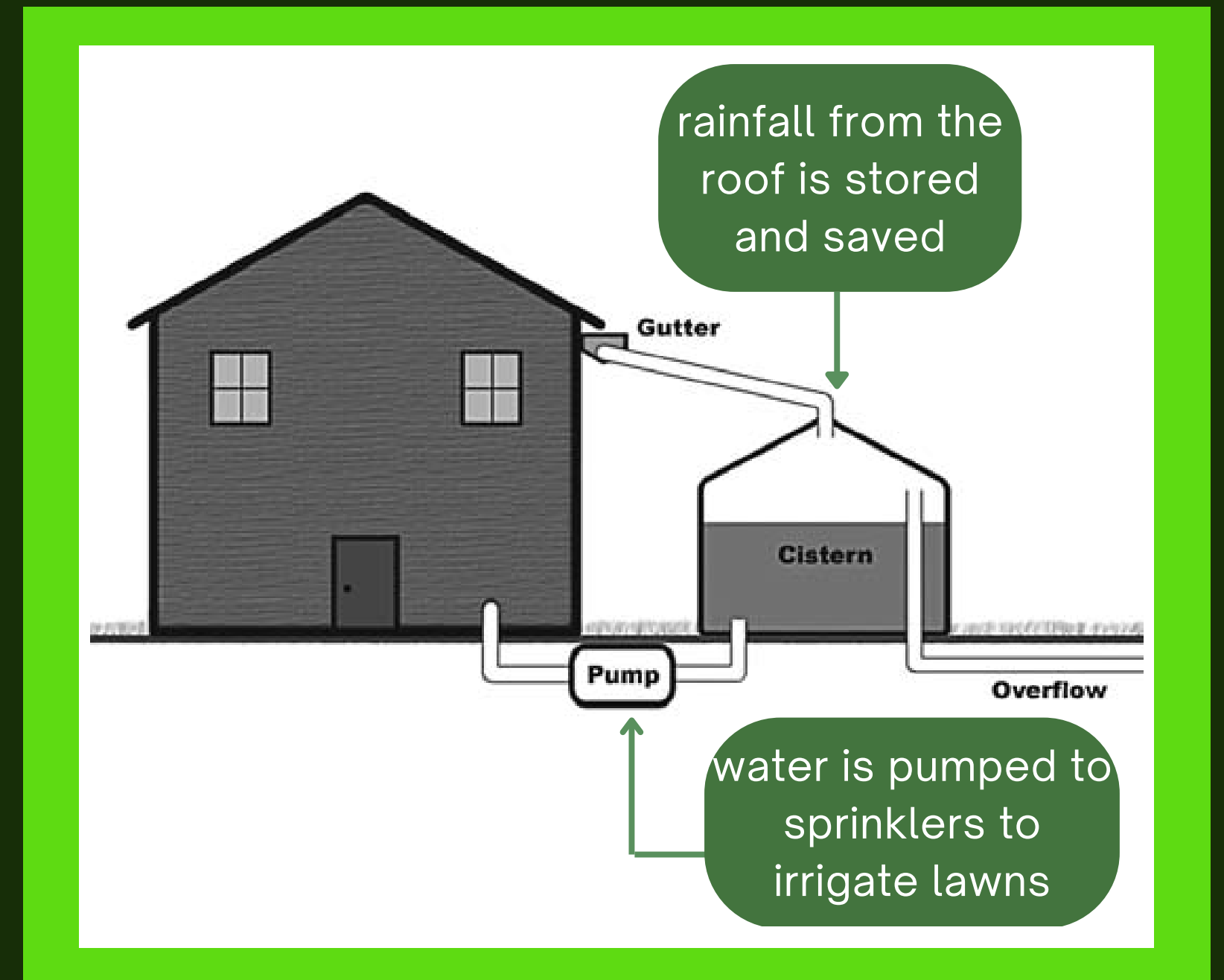
Replacing inefficient toilets with **WATERSENSE MODELS** can save **13,000 GALLONS** per year. Saving more than **\$140 PER YEAR** in water costs.

look for WaterSense EPA

The infographic features a blue toilet icon on the left. To its right, text states that replacing inefficient toilets with WaterSense models can save 13,000 gallons per year and save more than \$140 per year in water costs. A piggy bank icon is shown with the amount \$140. A 'WaterSense' logo with 'look for' and 'EPA' is in the top right corner. Several dollar signs are scattered around the text.

Toilet Flushing accounts for about 30% of water use in homes

National Standard= 1.6 gpf  
Water sense toilets= 1.28 gpf



Inefficient irrigation can waste up to **25,000 gallons** per year! Using a **natural resource** like **stormwater** relieves stress faced by water treatment plants and **saves** money and clean water for drinking.



# WORKFORCE HOUSING

SCG' strives to create affordable **workforce** housing *and* bring significant **environmental** and **social** progress to the Lake Worth Community.



SCG developments are meant to bring **positive change-makers** and **essential workers** to the community: teachers, government employees, law enforcement, emergency responders, doctors, and more.



# PATHWAY TO HOMEOWNERSHIP

Rent will remain **steady** and won't increase based on market demand. Instead, they will be based off of a local average income.

On the **3rd year** of living in the Sunset Drive Community, your rent payment becomes your monthly mortgage payment. (With no down payment required!)

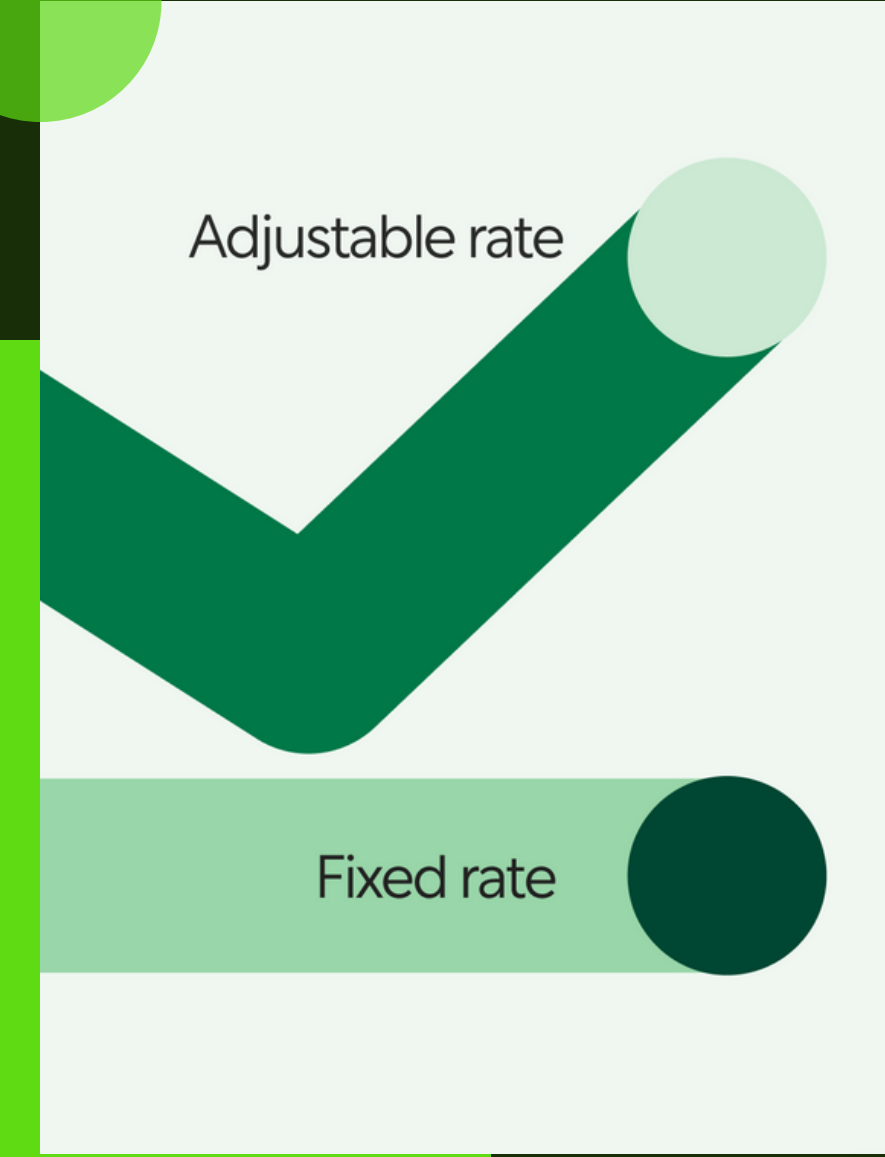


# GREEN LOANS

Residents can obtain **green loan** mortgages with **low, fixed** interest rates.

Sustainable development, paired with eco-friendly resident practices, allow for green loan eligibility.

This feature will attract and incentivize residents that will contribute to the **sustainable mission** of SCG, all while making homeownership possible for a broader audience.





# HOA COMMUNITY

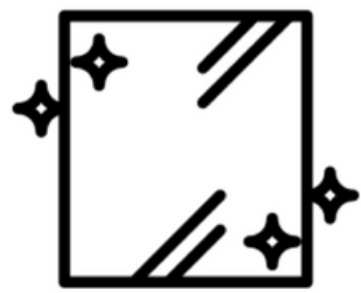
Residents will be automatically serviced from management within 24 hours to promote **efficiency**, **livability**, and **comfort** in the community.

Utility usage will be shown to residents through **easily accessible technology**. HOA will have **low fees** because the townhouses will be available for purchase.



# HOA- RESIDENT EDUCATION

## Things That Can Be Upcycled In Your Home:



Glass



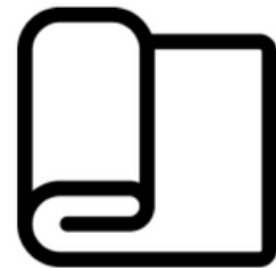
Metal



Wood



Boxes



Fabric



Cans

UPCYCLING: FROM SCG'S SUSTAINABLE LIVING GUIDE

- **Sustainable Living Guide**

- Provided by SCG for residents
- Highlights:
  - sustainable features of homes
  - how residents can be more environmentally friendly

- **Community Family**

- **application process** to admit sustainable individuals
- **continuously educating** residents
- **voting** on different rules within the community