



AFRICA

**Local Governments** 

for Sustainability

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#### **Compost Your Kitchen Waste**

## LEVEL OF IMPACT: 4/5 Stars

If everyone composted their kitchen food waste and ensured no scraps were wasted, we could reduce our carbon impact by up to 404 kgCO2e/person/year

This lifestyle choice assumes that households are responsible for ±86% of food waste at time of consumption

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 202 kgCO2e/person/year





#### **Grow Vegetables At Home**

## LEVEL OF IMPACT: 1/5 Stars



If everyone grew vegetables in their garden or on a vertical space to supplement their groceries, we could reduce our carbon impact by up to 13 kgCO2e/person/year

This lifestyle choice assumes that households could replace 1kg of bought vegetables per month from their garden, and that this would require 25 extra litres of water per kg

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 7 kgCO2e/person/year





#### Eat Vegetarian

## LEVEL OF IMPACT: 5/5 Stars



If everyone elminated meat and fish products from their diet, we could reduce our carbon impact by up to 1007 kgCO2e/person/year

This lifestyle choice assumes that there is no consumption of meat and that the equivalent weight of food is made up by 10% cereals, 50% vegetables and 40% beans, pulses

## and nuts

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 503 kgCO2e/person/year



#### **Follow A Plant-Based Diet**

## LEVEL OF IMPACT: 5/5 STARS

If everyone elminated all animal products (meat, dairy, eggs, etc) from their diet, we could reduce our carbon impact by up to 3326 kgCO2e/person/year

This lifestyle choice assumes that there is no consumption of any animal products and that the equivalent weight of food is made up by 20% cereals, 30% vegetables and 50% beans, pulses and nuts

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 1663 kgCO2e/person/year





#### **Eliminate Consumption Of Soda And Juices**

## LEVEL OF IMPACT: 4/5 STARS

If everyone replaced all sugary or processed drinks with water, we could reduce our carbon impact by up to 470 kgCO2e/person/year

This lifestyle choice assumes that more water is used instead of these products

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 235 kgCO2e/person/year





#### **Reduce Alcohol Consumption**

## LEVEL OF IMPACT: 3/5 STARS



If everyone replaced all alcoholic drinks with water, we could reduce our carbon impact by up to 147 kgCO2e/person/year

This lifestyle choice assumes that more water is used instead of these products, and that no other processed drinks are used as

## replacement

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 73 kgCO2e/person/year





#### **Reduce Portion Size**

## LEVEL OF IMPACT: 4/5 STARS

If everyone reduced their portion sizes by 25% at home and at restaurants, we could reduce our carbon impact by up to 925 kgCO2e/person/year

This lifestyle choice assumes that consumption is reduced evenly across food types

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 463 kgCO2e/person/year



#### **Take Left-Overs From Restaurants**

## LEVEL OF IMPACT: 1/5 STARS

If everyone ensured to eat all food that was put on the plate or taken home for eating later, we could reduce our carbon impact by up to 44 kgCO2e/person/year

This lifestyle choice assumes that restaurants are responsible for ±14% of food waste at time of consumption

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 22 kgCO2e/person/year



## **Repair Clothing**

LEVEL OF IMPACT: 4/5 STARS

If everyone repaired or tailored existing clothing instead of throwing away usable clothes, we could reduce our carbon impact by up to 293 kgCO2e/person/year

This lifestyle choice assumes that no new clothes are bought, but rather that existing clothes are fixed or

## fitted

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 147 kgCO2e/person/year



### **Maintain & Repair Electronics**

LEVEL OF IMPACT: 3/5 STARS

If everyone repaired electronics rather than throwing them away and purchasing new ones, we could reduce our carbon impact by up to 109 kgCO2e/person/year

This lifestyle choice assumes that no new electronics are bought, and a portion of the funds used to buy these are put towards repair

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 55 kgCO2e/person/year



### Services / Experiences Instead Of Goods For Holidays And Birthdays (Service Gifts)

LEVEL OF IMPACT: 1/5 STARS

If everyone, we could reduce our carbon impact by up to -49 kgCO2e/person/year

This lifestyle also assumes 100% adoption of this lifestyle.

If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to -24.5 kgCO2e/person/year



#### **Purchase Quality Clothing**

LEVEL OF IMPACT: 3/5 STARS



If everyone purchased higher quality clothing that would last longer, we could reduce our carbon impact by up to 188 kgCO2e/person/year

This lifestyle choice assumes that quality clothes might last three times

## longer before a new purchase is required

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 94 kgCO2e/person/year

#### Use eServices Instead Of Visiting Branches

## LEVEL OF IMPACT: 2/5 STARS

If everyone used online and virtual services rather than travelling into the branch, we could reduce our carbon impact by up to 76 kgCO2e/person/year

This lifestyle choice assumes that communications impacts would increase by X%, and public transport needs would reduce by 2.5%

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 38 kgCO2e/person/year



## Share And Repair Small Tools and equipment

## LEVEL OF IMPACT: 1/5 STARS



If everyone reduced new purchases of small tools and household electronics and repaired, shared or hired them instead, we could reduce our carbon impact by up to 7 kgCO2e/person/year

This lifestyle choice assumes that funds expended on purchasing new equipment could be used for repair instead

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 4 kgCO2e/person/year



#### Install a Solar Water Heater

# LEVEL OF IMPACT: 4/5 STARS

If everyone used solar water heating for all hot water needs at home, we could reduce our carbon impact by up to 289 kgCO2e/person/year

This lifestyle choice assumes that 39% of home electricity needs (for water heating) move to renewable energy instead of the coal-based electricity

## grid

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 145 kgCO2e/person/year



#### **Reduce Geyser Temperature**

## LEVEL OF IMPACT: 1/5 STARS

#### 

If everyone reduced geyser resting temperatures by 10 degrees celsius, we could reduce our carbon impact by up to 45 kgCO2e/person/year

This lifestyle choice assumes that 10% of water heating energy (±39% of home electricity needs) is saved

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 22.7 kgCO2e/person/year



## Halve Shower Time Or Bathwater Level LEVEL OF IMPACT: 4/5 STARS

If everyone halved the amount of water that needed heating for showering or bathing, we could reduce our carbon impact by up to 227 kgCO2e/person/year

This lifestyle choice assumes that there is a 50% energy saving for water heating (which uses ±39% of home electricity needs), and a reduction of water consumption (±XX% is for ablutions)

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 113 kgCO2e/person/year



#### Water-Saving Shower Heads And Taps

### LEVEL OF IMPACT: 3/5 STARS

If everyone installed water saving shower heads and taps, we could reduce our carbon impact by up to 120 kgCO2e/person/year

This lifestyle choice assumes that there is a 25% saving on water heating (which uses ±39% of home electricity needs) and a quarter reduction in water consumption

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 60 kgCO2e/person/year





#### Switch To Gas Cooking

LEVEL OF IMPACT: 4/5 STARS

If everyone replaced electric stoves and ovens with gas ones, we could reduce our carbon impact by up to 838 kgCO2e/person/year

This lifestyle choice assumes that 22% of home electricity needs (for cooking) move to gas energy instead

of the coal-based electricity grid

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 419 kgCO2e/person/year



## Task Lighting

## LEVEL OF IMPACT: 1/5 STARS



If everyone turned off all lights that are not in use in the house, we could reduce our carbon impact by up to 17 kgCO2e/person/year

This lifestyle choice assumes that 25% of home lighting is not needed and therefore 3% of home electricity

needs (for lighting) are reduced by 25% when these lights are off

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 9 kgCO2e/person/year





### Use Solar Lighting

## LEVEL OF IMPACT: 1/5 STARS

If everyone replaced all lighting needs in the house with solar lamps or photovoltaic electricity, we could reduce our carbon impact by up to 22 kgCO2e/person/year

This lifestyle choice assumes that 3% of home electricity needs (for lighting) move to renewable energy

## instead of the coal-based electricity grid

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 11 kgCO2e/person/year



### Install EE Light Bulbs

## LEVEL OF IMPACT: 1/5 STARS



If everyone replaced all incandescent lightbulbs with compact fluorescent lightbulbs, we could reduce our carbon impact by up to 39 kgCO2e/person/year

This lifestyle choice assumes that 3% of home electricity needs (for lighting) become four times more efficient and longer lasting bulbs mean 10 times fewer bulb purchases

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 19 kgCO2e/person/year





#### Invest In A Net-Zero Energy House (Solar PV)

LEVEL OF IMPACT: 4/5 STARS

If everyone installed a solar photovoltaic array on their homes to cover all energy needs, we could reduce our carbon impact by up to 742 kgCO2e/person/year

This lifestyle choice assumes that all home electricity needs move to renewable energy instead of the coal-

## based electricity grid

This lifestyle also assumes 100 % adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 371 kgCO2e/person/year





# LEVEL OF IMPACT: 4/5 STARS

If everyone carpooled to work instead of driving alone in a private vehicle, we could reduce our carbon impact by up to 377 kgCO2e/person/year

This lifestyle choice assumes that half of all weekday drivers become passengers on all trips, with an assumption that differences in trip distance would balance out

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 188 kgCO2e/person/year



# **Use Public Transport** LEVEL OF IMPACT: 4/5 STARS

If everyone took public transport instead of driving private vehicles, we could reduce our carbon impact by up to 571 kgCO2e/person/year

This lifestyle choice assumes that all trips are substituted with 60% busses and minibus taxis and 40% trains

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 285 kgCO2e/person/year



# Work From Home

## LEVEL OF IMPACT: 3/5 STARS



If everyone who works in tertiary service sectors worked from home instead of commuting to offices, we could reduce our carbon impact by up to 127 kgCO2e/person/year

This lifestyle choice assumes that all weekday commuting stops for all those invovled in education, knowledge services, consulting, financial services, law, etc (+20% of the population)

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 63 kgCO2e/person/year



## Halve Local And International Flights

## LEVEL OF IMPACT: 3/5 STARS

If everyone halved all local and international flights, we could reduce our carbon impact by up to 117 kgCO2e/person/year

This lifestyle choice assumes that flights and travel is evenly distributed by the population (which is of course not the case)

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 59 kgCO2e/person/year

# LEVEL OF IMPACT: 4/5 STARS

## **Stop Flying**





If everyone stopped flying entirely, we could reduce our carbon impact by up to 235 kgCO2e/person/year

This lifestyle choice assumes that flights and travel is evenly distributed by the population (which is of course not the case)

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 117 kgCO2e/person/year





#### Walk To Work

#### LEVEL OF IMPACT: 1/5 STARS



If everyone living less than 3km to work walked to work instead of using private or public transport, we could reduce our carbon impact by up to 18 kgCO2e/person/year

This lifestyle choice assumes that this is possible for 2% of the population, and assumes an even reduction on public transport and private vehicle

## carbon impact

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 9 kgCO2e/person/year



# Cycle To Work

## LEVEL OF IMPACT: 4/5 STARS



If everyone living less than 20km to work, cycled to work instead of using private or public transport, we could reduce our carbon impact by up to 266 kgCO2e/person/year

This lifestyle choice assumes that this is possible for 30% of the population, and assumes an even reduction on public transport and private vehicle

## carbon impact

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 133 kgCO2e/person/year





#### Use An Electric Vehicle (With Current Electricity Mix)

LEVEL OF IMPACT: 2/5 STARS

If everyone switched to an electric of hybrid vehicle, we could reduce our carbon impact by up to 86 kgCO2e/person/year

This lifestyle choice assumes that all private vehicles are replaced evenly by hybrid and electric vehicles. No change to electricity infrastructure, means these are still dependent on fossil energy

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 43 kgCO2e/person/year



## Use An Electric Vehicle (With Renewables)

## LEVEL OF IMPACT: 4/5 STARS

If everyone switched to an electric vehicle that could be powered by home or grid renewable energy, we could reduce our carbon impact by up to 469 kgCO2e/person/year

This lifestyle choice assumes that all private vehicles are replaced by electric vehicles, and that the investments are made to support renewable energy charging

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 235 kgCO2e/person/year





#### **Reduce Meals At Restaurants**

## LEVEL OF IMPACT: 1/5 STARS



If everyone stopped going to restaurants and cooked at home instead, we could reduce our carbon impact by up to 47 kgCO2e/person/year

This lifestyle choice assumes that restaurant eating is replaced by home cooking, increasing cooking electricity needs, and home food purchases

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 24 kgCO2e/person/year





#### **Choose Vegetarian Restaurants**

## LEVEL OF IMPACT: 3/5 STARS



If everyone chose to eat out only at vegetarian restaurants, we could reduce our carbon impact by up to 176 kgCO2e/person/year

This lifestyle choice assumes that restaurant carbon intenstities related to food are reduced by the same proportion as vegetarian lifestyle

#### choices

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 88 kgCO2e/person/year





#### eBooks

## LEVEL OF IMPACT: 1/5 STARS



If everyone used ebooks instead of purchasing hard copies, we could reduce our carbon impact by up to 8 kgCO2e/person/year

This lifestyle choice assumes that no new books are purchased, and instead an ebook device is purchased. This impact would go up

#### the longer one kept the device

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 4 kgCO2e/person/year





#### **Share Books & Public Library**

## LEVEL OF IMPACT: 1/5 STARS



If everyone shared books and took books out from the local libraries, we could reduce our carbon impact by up to 14 kgCO2e/person/year

This lifestyle choice assumes that no new books are purchased

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 7 kgCO2e/person/year





## Go Camping

## LEVEL OF IMPACT: 3/5 STARS



If everyone replaced hotel visits with camping trips, we could reduce our carbon impact by up to 128 kgCO2e/person/year

This lifestyle choice assumes that all hotel stays are replaced by camping, which is about 17% as carbon intense This lifestyle also assumes 100%

#### adoption of this lifestyle.

If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 64 kgCO2e/person/year





#### Halve the Time On Your Mobile Phone And Computer

LEVEL OF IMPACT: 3/5 STARS

If everyone spent less time using their computers or mobile phones, we could reduce our carbon impact by up to 116 kgCO2e/person/year

This lifestyle choice assumes that the electricity needs for charging are ±2% of household electricity, which is halved, and communications infrastructure needed be reduced by 50%

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 58 kgCO2e/person/year





#### **Relax Outside**

## LEVEL OF IMPACT: 3/5 STARS



If everyone went outside for socialising and relaxing, instead of using TVs and other indoor entertainment devices, we could reduce our carbon impact by up to 140 kgCO2e/person/year

This lifestyle choice assumes that assumes total reduction in TV and household entertainment electronics, and associated electricity needs (12%)

This lifestyle also assumes 100% adoption of this lifestyle. If half the population took this choice on, or did it at least half of the time, we could reduce our carbon impact by up to 70 kgCO2e/person/year

# **CAPE TOWN: FUTURE LIFESTYLE OPTIONS**

We have identified the below lifestyle options which Cape Town residents can adopt to reduce carbon-emissions for the city We are currently undertaking household experiments with Cape Town residents who have identified lifestyle options that they can undertake over a 2-3 week period Additional options suggested by workshop participants are included

Compost kitchen waste

Grow your own vegetables at home instead of from the shops

Increase number of meals at home instead of from shops or restaurants

Eat a plant-based diet (no animal products at all- no chicken, pork, mutton, goat, beef)

Eliminate cosumption of soda and juices

Reduce food waste

Reduce portion size by 25% across food groups and in restaurants

Repair damaged clothing + tailor poorly fitting clothes instead of discarding of them + hiring clothing

Retain functional mobile phone beyond contract expiry



Maintain & Repair Electronics instead of new purchases

Services / experiences instead of goods for holidays and birthdays (service gifts)

Long lasting clothing

Reading/spend time outside instead of TV





Movie streaming instead of hiring DVDs

Avoid staying in hotels when on holiday (Camp Holidays Instead of Hotelling)

Spend less time on your mobile phone

Solar Photovoltaics (PV) for all electricity needs

Do not eat out at restaurants

Shifting to LOCal Tourism

Shared facilities: Local public library instead of owning books

Share and Repair small tools instead of discarding them

E-reader instead of buying printed books

Shared facilities: Park/beach instead of garden

Shared facilities: Public pool / sea instead of swimming pool

Use mobile money and mobile e-banking services instead of going to the bank

Pets: Fewer pets

Reduce water consumption

Carpool instead of private car

Public transport instead of private car (use of MyCiti bus)

Telecommuting (working from home)

Only 1 local and 1 international flight per year

No flying

Walking to work

Water-saving shower heads and taps

Cycling instead of cars or public transport

Electric vehicle using renewables (using existing coal-based infrastructure)

Electric vehicle using current electricity grid

Electric vehicle using renewables at home (no wider infrastructure available yet)

Solar water heaters instead of electric

Limit shower time to a maximum of 4 minutes/ people bath in quick succession

Re-gifting goods

## Gas stoves for cooking

Shower instead of bathing

Monitoring electricity consumption

Turn lights off when leaving a room and use task specific lighting

Heat pumps for heating waster

Turn hot water cylinder thermostat down from 70 to 60 degrees (water heaters are ±40% of HH energy)

Energy efficient light bulbs

Geyser insulation: wrapping geyser tightly in water blanket and lagging on hot water pipes

Start separating my all waste

Assist in public education on all these topics

Use a fan to cool people rather than an airconditioner to cool the room

Use task lighting where necessary instead of lighting whole room

Creating common spaces for reusable goods

Make sustainability "cool" by finding creative community and/or business ideas for young children (and adults)

support small businesses, especially those making or using local produce

Linking people and organisations to Future Lifestyles using my own resource which is a Radio show that I present and I am available to train or share ways to meet a sustainable CT in 2030

House

Zero Energy

Energyefficient light bulbs