CO_2 balance for golf courses
Roskilde Golf Club as an exemplary case

RoGK

Lars Carlsen
Awareness Center

Objectives

Overall we want to contribute to a sustainable development

Golf clubs can contribute in several ways

thehimalayantimes.com

Objectives

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The CO_2 balance

The CO_2 balance

- Assimilation
  - Grass & Flowers
  - Trees
- Emission
  - Club house
  - Bag storage facilities
  - Green keeper facilities
  - Golf carts
  - External factors (transport)
  - Waste

blueskytp.com

Assimilation

- Grass & flowers
- Trees

Area in sq. metres
Roskilde: approx. 60.000

JW Luftfoto

Assimilation

- Grass & flowers
- Trees

Count!
number of trees
use e.g. Google maps

Roskilde: approx. 2.900

JW Luftfoto

Emission

- Direct emission
  - e.g. burning fossil fuel
    - Heating
    - Transport
- Indirect emission
  - electricity
  - remote heating

Dansk Drone Kompagni

Emission

- Club house
- Bag storage facilities
- Green keeper facilities
- Golf carts
- External factors (transport)
- Waste

Heating
- oil
- natural gas
- remote heating

Lighting (elec.)

Kitchen (excl. Light and heating) (elec.)

Dansk Drone Kompagni

Emission

- Club house
- Bag storage facilities
- Green keeper facilities
- Golf carts
- External factors (transport)
- Waste

Heating
- oil
- natural gas
- remote heating

Lighting (elec.)

Other (equipment washing etc) (elec.)

Dansk Drone Kompagni

Emission

- Club house
- Bag storage facilities
- Green keeper facilities
- Golf carts
- External factors (transport)
- Waste

Heating
- oil
- natural gas
- remote heating

Lighting

Machines (gasoline)
Machines (diesel)
Machines (elec.)

Harvey Brooke greenkeeper's blog from Redditch Golf Club

Emission

- Club house
- Bag storage facilities
- Green keeper facilities
- Golf carts
- External factors (transport)
- Waste

Electric driven

Gasoline driven

Destin Wheels

Emission

- Club house
- Bag storage facilities
- Green keeper facilities
- Golf carts
- External factors (transport)
- Waste

Players, Employees
- number of rounds (35.000)
- average km (25)
- average gasoline consumption (12.5 L)

Supplies
- number of deliveries (500)
- average km (20)
- average diesel consumption (10 L)

Figures from 2017

Pexels

The Drive

Emission

- Club house
- Bag storage facilities
- Green keeper facilities
- Golf carts
- External factors (transport)
- Waste

From the green keepers (22.940 kg)
From the club house (92.700 kg)
Cardboard (15.745 kg)
Waste oil (100 kg)
Metal (0 kg)

Figures from 2017

YouTube

Some statistics

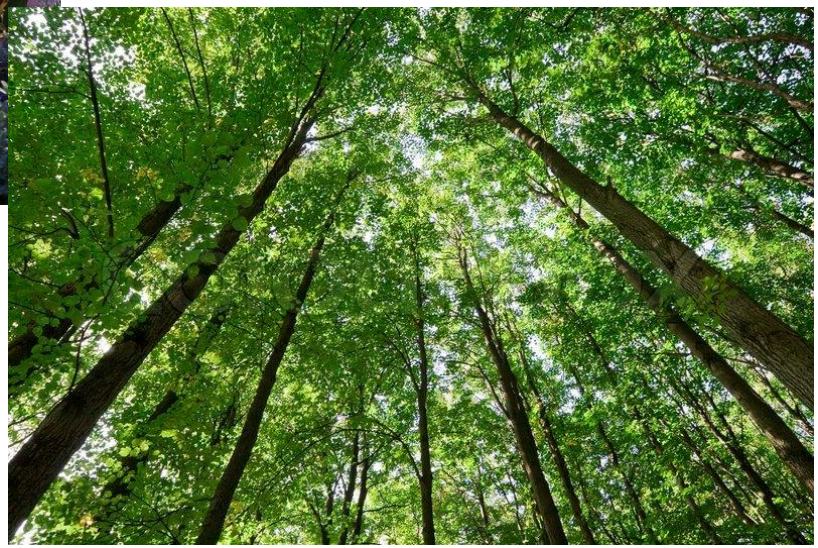
Total CO_2 balance (ton) : -101.9 (2017)

Number of members 2017: approx. 1400

- CO_2 emission per member (ton) : 0.073
- Average CO_2 emission per dane (ton) : 5.9
- ***CO_2 emission per member rel. to the average Dane : 1.2%***

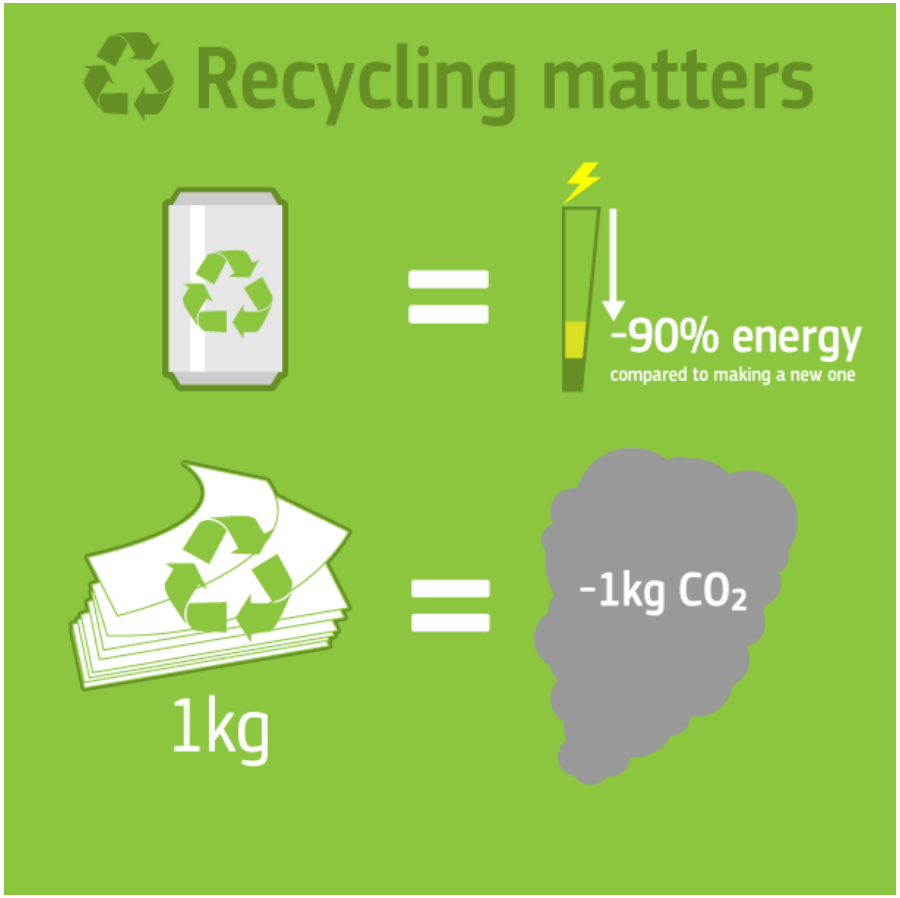
- Waste production per member (kg) : 82.6
- Average waste production per dane (kg) : 777
- ***Waste production per member rel. to the average Dane : 10,6%***

Colourbox



Colourbox

ebay.com



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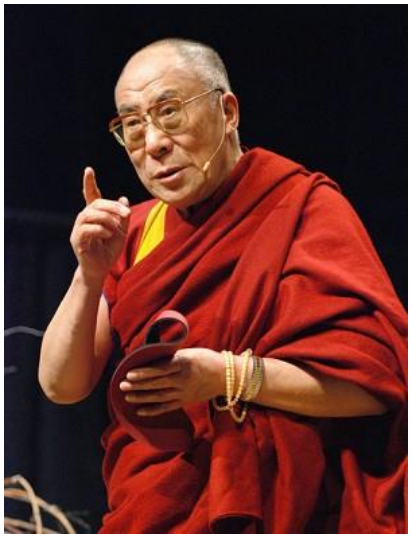

dalainews.blogspot.com

If you think you are too small to make a difference, try sleeping with a mosquito.

(Dalai Lama)

CO_2 balance for golf courses:

Tool developed by Roskilde Golf Club and made available through Danish Golf Union

THANK YOU
for your
ATTENTION!

Contact: LC@AwarenessCenter.dk