Reykjavík, 9. janúar 2018 R18010139

Borgarráð

Loftslagsmarapon - 2018

Lagt er til að Reykjavíkurborg leiði loftslagsmaraþon í Reykjavík þann 28. október 2018 með því að leggja til starfsmann tímabundið í kringum viðburðinn og aðstöðu fyrir þátttakendur í þann sólarhring sem loftslagsmaraþonið fer fram. Einnig er lagt til að stutt verði við vinningshafana frá árinu 2017 og 2018 með því að veita viðkomandi liði aðstöðu í 3 mánuði til að þróa verkefnið áfram og aðgang að starfsmanni Reykjavíkurborgar sem leiðbeinanda.

Greinargerð:

Loftslagsmaraþon er haldið í heilan sólarhring um allan heim á hverju ári, síðast var það haldið á sama tíma, 27. október 2017 í 104 borgum og voru þátttakendur alls 4.479. Tilgangur loftsla gsmaraþonsins er að draga fram nýjar lausnir og hugmyndir til að sporna gegn loftslagsbreytingum en hugmyndirnar eru unnar í samráði við háskóla og nýsköpunarstarf. Verkefnið fellur vel að bæði snjallborgar- og loftslagsstefnum Reykjavíkurborgar. Climate-KIC (<u>https://climathon.climate-kic.org/</u>) stendur fyrir loftslagsmaraþoninu en það er stærsti evrópski samstarfsvettvangur einkageirans og hins opinbera um nýskapandi lausnir í loftslagsmálum. Climate-KIC var stofnað 2010 sem eitt af verkefnum EIT (European Institute of innovation and technology, <u>http://eit.europa.eu/eit-community/eit-glance</u>).

Reykjavíkurborg var styrktaraðili og þátttakandi í fyrsta loftslagsmaraþoni á Íslandi í október á síðasta ári. Alls tóku þá þrjú lið þátt í maraþoninu og lögðu þau til eftirfylgjandi hugmyndir: iMe: Integrative Mobility Ecosystem (app sem bestar ferðamáta útfrá losun gróðurhúsalofttegunda)

iMe: Integrative Mobility Ecosystem (app sem bestar ferðamáta útfrá lösun gröðurhúsalofttegunda) en sú hugmynd var jafnframt vinningshafi maraþonsins í Reykjavík 2017.

Little Green Fingers (tilraunaverkefni um matjurtaræktun í gróðurhúsi við valinn leikskóla / skóla) og

Magic Bus (samkeppni um skreytingar á strætó meðal skólakrakka). Sjá nánari lýsingu á verkefnunum og maraþoninu sjálfu í fylgiskjölum.

Næsta loftslagsmaraþon verður 28. október 2018 um allan heim. Kostnaður Reykjavíkurborgar við að leiða verkefnið er falin í vinnuframlagi starfsmanns Reykjavíkurborgar, að útvega aðstöðu fyrir maraþonið í sólarhring, fæðiskostnaður þátttakenda og verðlaun fyrir það lið sem vinnur.

Dagur B. Eggertsson

Hjálagt: Reykjavik Climathon 2017 - report, dags. 30. nóvember 2017. Dagskrá Climathon Reykjavik 2017. iME- verkefni unnið í loftslagsmaraþoni 2017 (vinningsliðið árið 2017). LittleGreenFingers - verkefni unnið í loftslagsmaraþoni 2017. MagicBus - verkefni unnið í loftlagsmaraþoni 2017.





REYKJAVÍK CLIMATHON 2017 -REPORT

Challenge and context

Title of the challenge: Let's improve the air of Reykjavík!

Challenge description: The AIR is what's keeping us alive. It is necessary so we need to take care of it.

The greenhouse gases (GHG) we emit to the atmosphere are causing global warming. Part of them come from our cars and other transport. They also emit particles that are dangerous for our health but also contribute directly to climate change by affecting the amount of sunlight coming in by reflecting or absorbing it.

Reykjavik is known to be a **green city** thanks to its renewable energies (hydroelectric- and geothermal power) that power the city. But in 2015, the carbon emissions per Icelandic citizen was 10.2 tons compared to 5,8 tons per EU citizen. Hence, that is why Reykjavik took the decision in 2016 to become **carbon neutral by 2040** in accordance with the Paris Agreement from the COP21 in 2015. In order to achieve that goal, Reykjavik has to tackle the challenge of eliminating all human induced greenhouse gas (GHG) emissions in the city.

This challenge can be tackled in two points (and of course many others!):

1. <u>Transportation mode / citizens mobility:</u>

How can we improve the use of public transport? How can we incentivise people to take their bikes or walk in the city? Are there new ways to move in the city? What about the trains-like transportation?

In order to make that happen, we need to find solutions to adapt the infrastructures in the city. Better road quality, better bike lanes ... Any innovation and ideas will be welcome!

Fun fact: How many kilometers do Icelandic people drive in a day, measured as trips to the moon? A hint, the distance Earth-Moon is 384 000km (answer below).

2. Harbours & industries: Reduce our GHG emissions and air quality in general

The harbours are really attractive and highly used (cruise ships, cargo ships, fishing vessels and pedestrians...) and the GHG emissions and particles are sky-rocketing in these areas (<u>http://bit.ly/2eFZoRN</u>). How can we invert that and switch to electricity in the city, for example? Same thing is for the industries: how do we reduce the GHG emissions without impacting on the productivity?

Organiser and partners

Reykjavík Climathon has been organised by Justine Vanhalst, employee of Matís. The event has been supported by Matís ohf, itself, the city of Reykjavík, the French Embassy, the European delegation in Iceland and the Icelandic Ministry of Environment. The support has been either or both financial and by practical support (men-power).

Ideas and participants -Winning Idea

iMe: Integrative Mobility Ecosystem

Team members:

Aarne Gralund (Finland) – M.Sc. Climate Change/Politics Bhuiyan Seraj (Bangladesh) – M.Sc Fisheries/Food Science Gisela Cardoso (Portugal) – Microbiology/Pharmacology Weston Neal (USA) – Tour Guide Kristjan Leosson (Iceland) – Innovation Center Iceland

General summary:

The proposed project is a smart traffic planning app that uses the modern technology at our fingertips to improve how we travel around our city. It will create concious planning about our modes of transports, how healthy, how expensive and how we impact the local environment and air quality. Primarily this app will offer alternatives to private and single car usage which is the major driver of poor air quality in Reykjavik by raising awarenes of the alternative travel options avaliable.

This app will work with both local indviduals and transport businesses to develop a fully intergrated mobility system. Additional information provided by the app to discourage single car usage will be rapid traffic projections, and car sharing options. This app will build on experience from other global cities that use a similar transport streamlining system.

Climate impact:

-The overall aim of this app is to reduce private and single car usage. This wil reduce the total number of cars on the road, and so the emissions, improving air quality in Reykjavik.

-This will also improve the quality of the roads, and air quality associated with asphalt damage since fewer vehicles means lower damage to the roads.

-Second Idea

Little Green Fingers

Team members:

Alexandra Leeper (England) – PhD Student in Sustainable aquaculture and marine resources research.

Ingrida Milko (Lithuania) – Environmental photography, SEEDs Volunteer.

Harriet Blotchaway (Gana) – MSc student in Environmental Resources

General summary:

Pilot scheme for an educational add-on in primary schools. We propose a complimentary course in growing local food and reducing food waste alongside the existing cooking classes. During the pilot, this year long curriculum add-on would aim to teach children the basics of vegetable gardening and care with a practical hands-on approach, cookery classes that use ingredients as efficiently as possible and even ingredients that are past their sell-by date, but still safe.

Finally, children will cook a meal for parents and local community at an end-of-year advent. This event will raise awareness for local food and bring the community together. The longterm objective of this project is to reduce imports of food, reduce food waste and to enhance connectedness between children, their source of food and their community.

Climate impact:

Several ways in which this scheme could reduce climate impact in Iceland in the long-term:

-Reduce food imports from overseas, so cutting down on air pollution associated with transport and carbon footprint of food.

-Optimise the amount of food product that is useable, and raising awareness of unnecessary food waste. Food waste adds to air pollution as it breaks down in the environment releasing methane and carbon dioxide, both potent greenhouse gases.

-Third Idea

Magic Bus

Team members:

Marie Jecker (France) – Environmental engineer with background in sustainability issues.

Mai Duong (Canada) – MSc student in environment and natural resources.

General summary:

This project proposes to reduce air pollution in Reykjavik city through a public engagement program that will encourage and boost the use of the public transport system, the Stræto buses. The key target audience of this public engagement is school age children who will have the opportunity to compete in a design competion to er-decorate the Stræto buses of Reyjkavik in them ost creative way they can imagine. A pannel of artistic judges will select a winner and several runners up which will then be actually applied to buses in the city centre. Not only will this bring excitment and interest in using public transport, but each child will then receive a special check-list, competing to ride on each of these decorated buses over the year to win free bus rides. Similar decorated and interactive public transport have been used globally, for example the cat trains in Japan, and the Danish decorated buses with success.

Climate impact:

-Engaging school age children in the public transport system will encourage them to view this as a preferable form of transport to travelling by car, as bus journies will be more fun and personalised experience. The school children will then have a personal connection to the public transport system.

-More individuals using public transport will overall reduce the car ownership and air pollution in the crowded city centre.

-It is hoped that by targeting school age community memembers, this project will develop public transport for life, creating a long term positive impact from this project.

Participants informations

The total number of participants during the Climathon was of 13 persons but not all of them stayed for the full 24-hours event.

Participant name	Email address	Idea or project he/she worked on	
Aarne Granlund	aarnegranlund@gmail.com	iMe	
Gisela Cardoso	cardoso.gisela89@gmail.com	iMe	
Kristjan Leosson	kristjan.leosson@nmi.is	iMe	
Weston Neal	westonneal@gmail.com	iMe	
Bhuiyan Seraj	serajban@gmail.com	iMe	
Johanna Velasquez	johannav622@gmail.com	Little Green finger	
Ingrida Milko	milko.ingrida@gmail.com	Little Green finger	
HARRIET NAA TECKIE BOTCHWAY	harrietbotchway24@gmail.com	Little Green finger	
Alexandra Leeper	alexandral@matis.is	Little Green finger	
Sigrid Merino	sigridmerino@hotmail.com	Magic Bus	
Marie Jecker	marie.jecker@gmail.com	Magic Bus	
Mai Duong	mai_duong@hotmail.com	Magic Bus	
Kristina Daisy Racz	kristinaracz89@gmail.com	Magic Bus	

Program and talks

See attached the document in the e-mail with the detailed program.

Here a recap of it. Note that Áslaug Thelma Einarsdottír from Orka Náttúrunnar didn't come.

Climathon	AGENDA	et (matis)			
Reykjavík	Friday 27 th ,October	Climate-KIC City of Reykjavík			
13:00 – 13:10: Introduction speech by the organisor					
13:10 – 13:20: Opening session with the Mayor of Reykjavík – Dagur B. Eggertsson					
13:20 – 13:30: French Embassador – M. Graham Paul					
13:30 – 14:00: Umhverfisstofnun – <i>Vanda Úlfrún Liv Hellsing</i>					
14:00 – 15:50: Team work with the facilitators					
15:50 – 16:10: Heilbrigðiseftirlit Reykjavíkur – Svava S. Steinarsdóttir					
16:10 – 16:30: Veðurstofa Íslands – Halldór Björnsson					
16:30 – 16:50: Strætó - Jóhannes Svavar Rúnarsson					
16:50 – 17:10: Orka Náttúrunnar – Áslaug Thelma Einarsdóttir					
17:45 – 18:30: Cooking class with Dóra Svavarsdóttir from Culina					
20:00 – 20:40: Diner + Benjamin Sigurgeirsson					
20:40 – 00:00: Team work with the facilitators					



Direct action for the Climate during the Climathon

Planting trees:

During the Climathon 2017, at midnight, the participants planted 30 trees offer by the municipalities of Reykjavík in front of the facilities of Matís ohf.

The planting has been supervised by Krítinn H. Þórsteinsson. The trees will be taking care of by Justine Vanhalst, the organiser of the Climathon.

Smart cooking class:

A cooking class has been realised for the dinner of Friday night by Dóra Svavarsdottír, chef at Cúlina restaurant. The purpose was to bring awareness concerning food waste and that the quality of the food doesn't reside in the beauty of it. By cooking what is called "ugly food" the participant might change his habits of consumption in supermarket.

Furthermore, the class emphasised also on the importance of using all the vegetable/fruit to cook with and thus reducing the amount of organic waste.

Implementation of the projects

The purpose of Climathon is to see the ideas coming up during this event, being realised in reality. The objective in this report is to show the importance and interest that can have the ideas in questions.

All teams members are willing to be part of their own project if there is a possible future application of it. If an approval is given by the city hall of Reykjavík, teams are keen to move forward with proposal and budgeting plans. (attached the contact details).

I, Justine Vanhalst, commit myself to facilitate and ensure that everything will be taken into consideration before any decisions regarding the implementation of the ideas.

I am convince that with good communication and discussion we can take profit of the Climathon in order to succeed in reaching the objectives dictate by the Paris Agreement from the COP21.

Reykjavík, 30th of November Justine Vanhalst





Climathon

Event Program

Speakers

	Friday		Saturday
	13:00-13:05	Justine Vanhalst	01:00-01:30
	13:05-13:20	Dagur B. Eggertsson	01:30-07:00
	13:20-13:30	M. Graham Paul	07:00-08:00
	13:30-14:00	Vanda Úlfrún Liv Hellsing	08:00-08:30
	44.00 45.00		08:30-10:30
	14:00-15:00	Solveig Zophionassdóttir	10:30-11:30
	15:00-15:30	Groups	11:30-12:00
	15:30-15:50	REFRESHMENTS	12:00-12:10
	15:50-16:10	Svava S. Steinarsdóttir	12:10-12:20
	16:10-16:30	Halldór Björnsson	12:20-12:30
	16:30-16:50	Jóhannes Svavar Rúnarsson	12:30-13:00
	16:50-17:10	Team work	
	16:50-17:45	Facilitator	Co-ordinating
	17:45-18:30	Cooking dinner with Dóra	
	19:00-20:00	DINNER	
1	20:00-20:20		
Ĩ,	20:20-20:40	Benjamin Sigurgeirsson	Justine
10	20:40-23:40	Team work	
	23:40	Kristinn H. Þorsteinsson	
-	00:00-00:43	MIDNIGHT TREE PLANTING	

matis

Climate-KIC

HafÞór

Design Thinking Team workshops

> Yoga with Verka Paluskova BREAKFAST **Team Work Team Presentations Jury Deliberation** Winner Announced Björt Ólafsdóttir **Michael Mann** LUNCH

ng Committee



Solveig

Dagur B. Eggertsson M. Graham Paul Reykjavikuborg French Embassy Vanda Úlfrún Liv Hellsing Umhverfisstofnun Svava Steinarsdóttir

Heilbrigðiseftirlit Reykjavíkur



Benjamin Sigurgeirsson **HI/TEDx Reykjavik**



Björt Ólafsdóttir Björt framtið



Michael Mann **Eu Embassy**



Halldór Björnsson

Kristinn H. Þorsteinsson Garðyrkjufélag Íslands



Jóhannes Svavar Rúnarsson

Strætó



iME Integrated Mobility Ecosystem for the Reykjavik area

What we want to solve

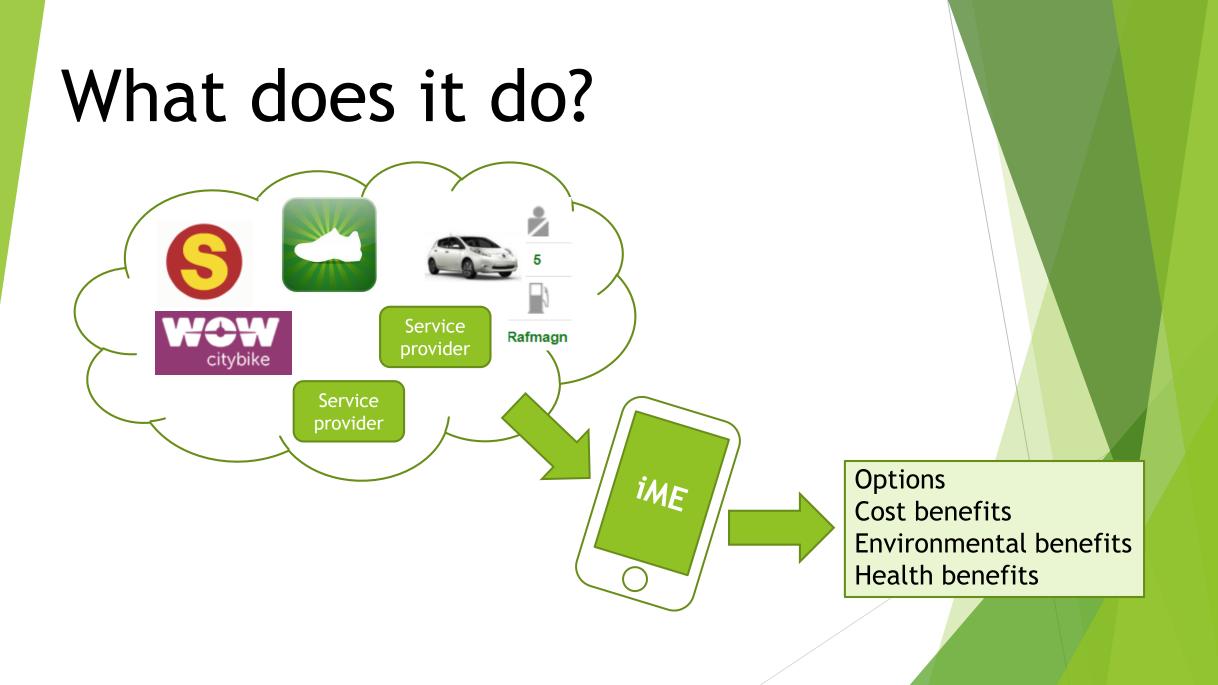
- Traffic congestion
- High carbon emissions
- Traffic-related air pollution

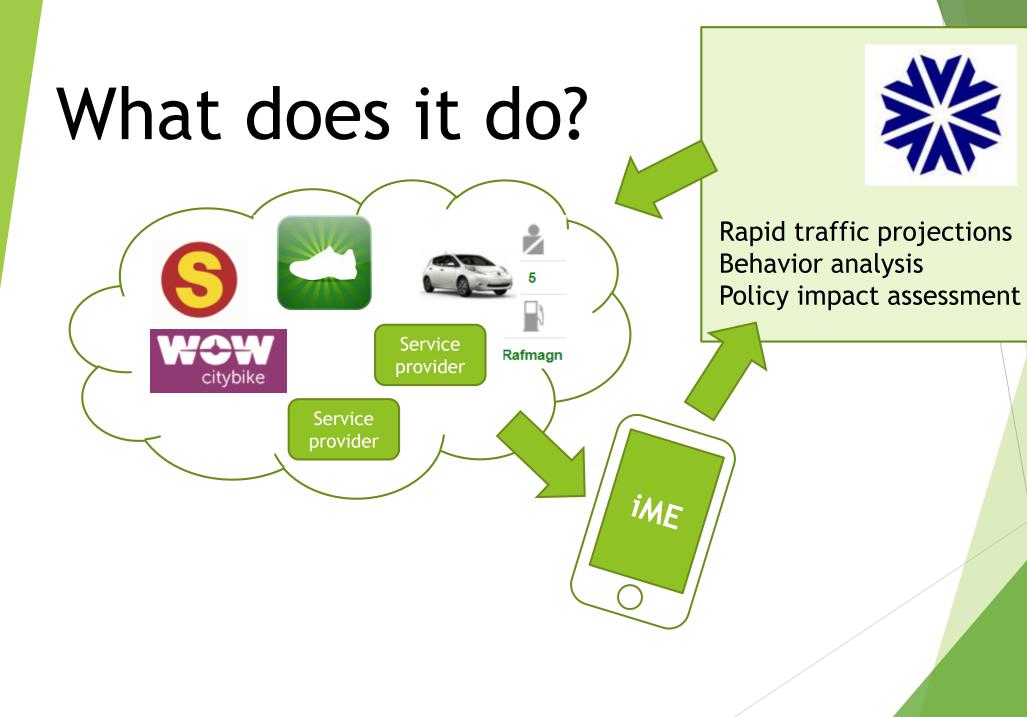
Let's look at the numbers

- 6.000.000 km/day driven in Reykjavik
- High ownership and operating cost of a private car
- Plug-in cars are still only 1.5% of the total fleet
- Asphalt-related particle pollution
- Road transport accounts for half of non-ETS Energy-GHG emissions
- Passenger potential must be increased for future public transport options

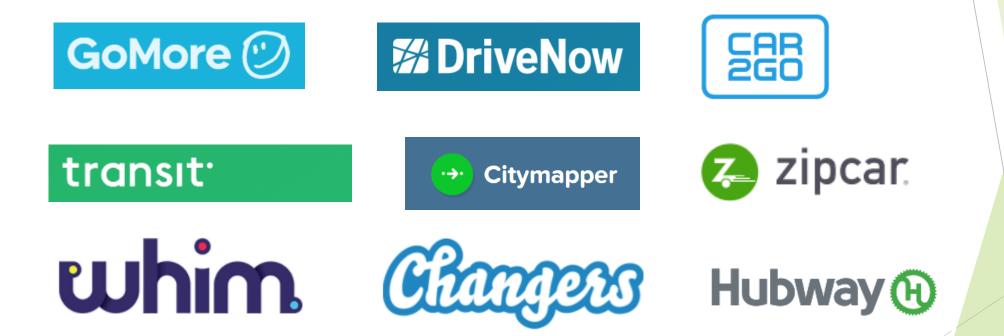
Our solution

Smart traffic planning Alternatives to private car use





Many examples for inspiration



Benefits

USERS

- Cost savings
- Health benefits
- Convenience
- Citizen advice

SERVICE PROVIDERS

- Certification
- More customers
- Social responsibility

MUNICIPALITIES

- Limiting car traffic
- Reducing emissions and pollution
- Influencing behavior patterns
- Policy impact analysis



Aarne Gralund (Finland) M.Sc. Climate Change/Politics

Bhuiyan Seraj (Bangladesh) M.Sc. Fisheries/Food Science

Gisela Cardoso (Portugal) Microbiology/Pharmacology

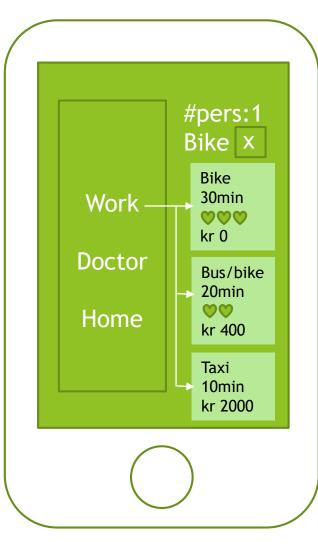
Weston Neal (USA) Tour Guide

Kristjan Leosson (Iceland) Innovation Center Iceland

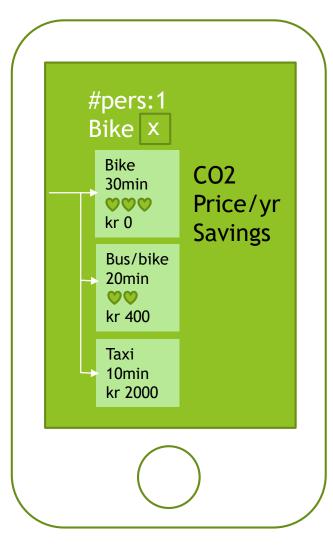
What does it do?



What does it do?



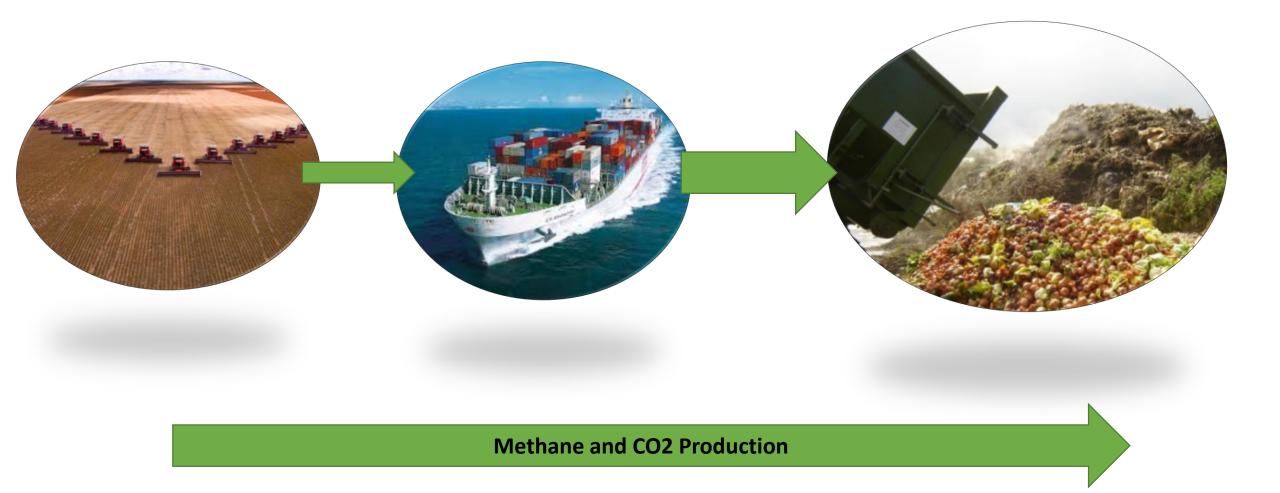
What does it do?





Little Green Fingers

FOOD WASTE AND CLIMATE CHANGE



Solution?



Positive behavioural changes for food production and food waste



Cooking and Preserving

HOW?



Long Term Benefits?

- Reduced food waste and increased food appreciation
- Quality locally grown food
- Strengthening community bonds
- Increasing environmental awareness



Thank You



GARÐABÆR

AFNARFJÖRÐUR

Marie Jecker



Examples

- Children's Bus Decoration from Christmas Time
- Pride Bus
- Japanese Cat Train
- Denmark Public Bus





