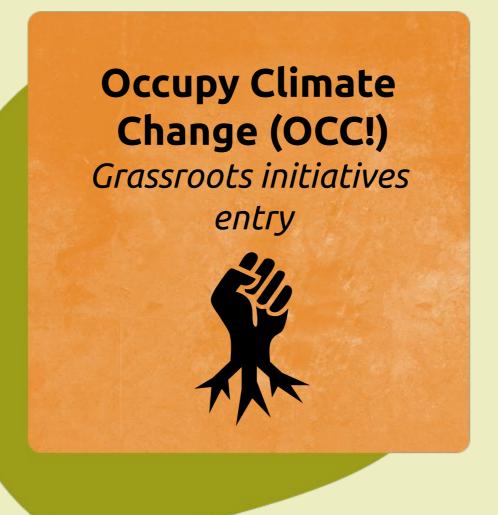
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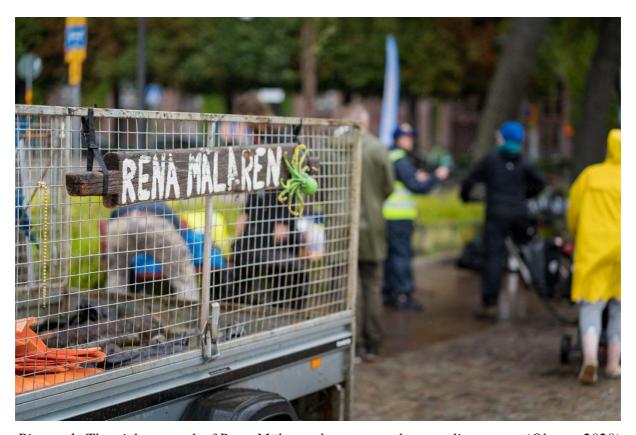






## Rena Mälaren – a climate mitigation and sustainability initiative Ellen Ahlgren

Rena Mälaren is an initiative located in Sweden, primarily doing their sustainability work within the city centre of Stockholm. Stockholm, which is the capital of Sweden, claimed the nickname "the Venice of the North", since the city stretches across fourteen islands where Lake Mälaren flows into the Baltic Sea. This consequently generates a lot of boat-traffic within the city, with many small marinas scattered throughout the larger city centred islands. A significant human induced problem, especially in the marinas but also throughout the lake near the islands, is waste dumping by individuals. The non-profit organisation *Rena Mälaren* therefore aims to both engage and motivate locals in the protection of the already fragile water body, but also to actually remove waste with the help of divers and non-divers.



Picture 1: The pick-up truck of Rena Mälaren that goes to the recycling centre (Olsson, 2020)

Rena Mälaren was created by Fredrik Johansson and today the organisation has over 50 voluntary locals who help with clean-up of Lake Mälaren. The organisation is non-profit, and the promoters are the voluntary individuals who spread the message through social media and verbally to their friends and family. Since the work of the organisation is in public locations,

Rena Mälaren also gets recognition when doing their environmental clean-up since people pass and wonder about the work. Fredrik Johansson started the organisation when diving for fun around Stockholm city centre and realised that there were tons of waste that existed on the bottom. Lake Mälaren is a water source for around 1.5 million people, to pollute the water with both waste and especially toxic waste, means that the 1.5 million people would need a new non-polluted source of water, which is both energy demanding and rare to come by because of water scarcity.

The main objectives of the organisation are to remove toxic chemicals from the lake - primarily from lead batteries, electric scooters, and other hazardous objects. This is the main communication of the organisation, however, along with the positive environmental work that *Rena Mälaren* does, climate positive outcomes are a result that the organisation is very much aware of and also brings up when discussing the positivity of the initiative. This is for example in case of all of the collected waste of *Rena Mälaren* being recycled, which in turns saves both energy production and carbon emissions, when comparing recycled materials with producing new materials from raw materials. This is important, since the amount of waste collected is vast, and a lot of the collected materials are from metals, glass, and hard plastic from tires. These are all very energy demanding to create, hence, to recycle these products would save a lot of energy and be a climate mitigation action.



Picture 2: Some of the waste that Rena Mälaren has picked up from Norrmälarstrand in Stockholm with volunteers in the background (Olsson, 2020)

As previously mentioned, another of the objectives of *Rena Mälaren* is also to create a reaction and acknowledgment of the large waste problem that the city has, that is not easily noticed because of the lack of visibility of the garbage. This objective is in turns also a climate mitigation one, since the initiative creates additional engagement of locals to recycle already produced materials.

Rena Mälaren started 2018 and since then they have had at least one waste pick-up per week. Since the start they have picked up 14,3 ton lead batteries, 489 electric scooters (around 14 ton), 1 car, 1 motorcycle and around 40,3 ton of other waste. The organisation is involved with several actors and affiliate partners who are supportive of the work of Rena Mälaren. Among these are some dive centres, but also two Swedish construction companies and four electric-scooter companies. These companies are helping the initiative and supporting the cause, but not gaining any additional profit from it.

The municipality of Stockholm are not opposed to the work that Rena Mälaren does, however they are not assisting them either. Rena Mälaren has for example asked if the municipality could help with the administration of bins, but the municipality declined. If the municipality would help with this, the sorting and recycling part of the initiative would be easier, but now instead *Rena Mälaren* have to use their own sorting ways. Another limitation *Rena Mälaren* has met is that the recycling centres in Stockholm only lets private persons recycle 4 tires at a time. This makes it very hard for Rena Mälaren to do their work and recycle the tires, since per waste pick-up there is usually more than that. Problematic issues that can arise from the initiative is that there could be dangers with picking up toxins that are in a closed container, both for the diver but also for the environment. This is why the divers who are picking up the waste should be certified and have proper knowledge regarding on how to take precautionary measures.



Picture 3: Fredrik Johansson, the founder of the initiative (Olsson, 2020)

Since the only thing that is needed for an initiative like *Rena Mälaren* is divers and volunteers to be on land and pull up waste, similar initiatives around water bodies could definitely be implemented. There are probably already similar projects around the world, but it is perhaps not as common to do a project like this in the city centre of a capital. However, cities with similar structure could implement similar initiatives and this is encouraged by *Rena Mälaren*.

Hopefully, *Rena Mälaren* will make a greater impact and get the municipality of Stockholm to understand the immensity of this problem and get them to implement stricter laws, especially in the marinas of Stockholm. This could for example be that the marinas themselves should be responsible for the disposed waste within their marinas. Such an implementation would lead to less work needed by private initiatives and also it would make the marinas aware of the waste that the boat-owners dump in their marina. To spread knowledge regarding what gets dumped in the water body of the city is also very important and is one of the greater impacts that the initiative have on the municipality and its residents.

## References

The references used in this entry is information regarding Rena Mälaren which can be found on their website linked in references. Also, some information was from the creator of the initiative Fredrik Johansson. The photos used in this entry is with the consent of and by Oscar Olsson, who owns the rights to the photographs.

RenaMalaren. 2020. [online] Available at: <a href="https://www.renamalaren.com/">https://www.renamalaren.com/</a> [Accessed 23 October 2020].

Oscar Olsson, 2020. [photographs] (Oscar Olsson's own private collection)