Access Cities

Open Innovation Call in Copenhagen
targeting Air Quality and Urban Heat Island Effect

Q&As from webinar, 9 September 2019

Q: What is the funding rate? Do you pay overhead?
A: There is no funding for solutions or winners in this open innovation call. It might be possible to negotiate a pilot with the City of Copenhagen if the city finds the idea/solution relevant, and there will be funding for such a pilot.

Q: It's very strange to hear that all level of solutions can participate without respect for TRL (Technology Readiness level). Why this choice?
A: As this is an Open Innovation Call without too defined categories or solutions to be prioritized, hence we are looking for all kinds of solutions that the city can take into consideration when acting holistic on the challenges at hand.

Q: Can you kindly explain why you are only referring to 6% emission which is linked to traffic? Is that a correct number, because it seems very low compared to the information from other cities (~up to 50% linked to traffic).
A: Based on figures from national emission inventories, the correct figures for Copenhagen in 2013 are respectively 32% Pm2.5 and NO_2 55%.

Q: As a submitting organisation, will there be the chance to meet city partners even if you are not selected as a winner?
A: I might be possible to attend the Open Innovation Day.

Q: How is the heat island phenomena is currently monitored?
A: We are monitoring it through satellite images – but this has not been done on a regular basis. The plan is to start doing it more systematically.

Q: If there is no funding, then participants are expected to be self-funded?
A: This call is similar to many other calls; participants are expected to decide for themselves whether resources put into an application is worthwhile the effort and potential outcome/value.

Q: Air quality is a very complex issue that only specialist of products or scientists can try to put in place real solution.
A: We do not see it that way. Many things can be altered or changed to improve air (and life) quality, e.g. changed behaviour, legislation, green transitioning etc.

Q: Will there be two finalist solutions? One for Urban Heat Island effects and one for Air Quality?
A: No, there will only be one winner, and it could be form either Air Quality or Urban Heat Island Effect as main issue – or a combination.

Q: Foreign companies are welcome to reach out to Copenhagen Capacity (Inward investment agency) for support and to understand business case and opportunities in Copenhagen.
A: Great, thanks, Matthew Delany! (www.copcap.com, mde@copcap.com).

Q: Are you interested in 'innovations' that have been piloted elsewhere or only something completely new?
A: We welcome all ideas or solutions.

Q: You are mentioning that you have installed "Monitoring program for air quality" in Copenhagen. What exactly did Copenhagen do already?
A: There are three air measuring stations in Copenhagen, one measuring urban backgrounds and two that measures street-level air pollution. You can read more via this link (in Danish):
https://envs2.au.dk/luftdata/presentation

Q: Can we get access to Air Quality Measurement Station Data? Levels of NO_x/CO_2 in the air along the main roads like H. C. Andersens Boulevard?
A: For data for Copenhagen, please check out the following links:
http://kbhkort.kk.dk/spatialmap?
http://lpdv.spatialsuite.dk/spatialmap (Year of measuring is 2012, data will be updated fall 2019.)
https://www2.dmu.dk/1_Viden/2_miljoe-tilstand/3_luft/4_maalinger/5_database/hentdata_en.asp
http://aqicn.org/city/denmark/copenhagen/h.c.andersens-boulevard/

Q: Do you have a breakdown or details of specific air pollutants – gases, particles, metals, etc.?
A: No available breakdown of details of specific air pollutants.

Q: Are Mobility-related solutions are accepted?
A: Yes, certainly!

Q: You recently stated that the 5% emission of traffic is linked to particles (PM), but how about NO_2? Do you know how much it is?
A: It depends on what kind of data you are looking for. In 2013, road traffic contributed by approx. 44% NO_2 for urban background pollution and approx. 33% PM 2.5. While road traffic's share of air pollution in urban backgrounds was approx. 16% and approx. 1.7% PM 2.5

Q: Which agency within the city is responsible for emissions enforcement? Are there different agencies responsible for ship-based and/or power plant emissions?
A: The Technical and Environmental administration is partly responsible, but the monitoring and the legislation is done on a national level (Ministry of Environment). The city has very limited possibility to enforce the legislation. Power plant emissions are also regulated through national legislation.

Q: You are stating that there is a process ongoing to remove 75% of traffic from Copenhagen. Can you explain us more about this please?
A: We are not having such goals (75 %) but are encouraging people to choose other transportation modes if possible (public transportation, bicycles, walking), and are constantly looking at tools, regulations, passability/accessibility for cars etc. – we want to bring down the total amount of car/truck trips in Copenhagen.

Q: The city's combined heat and power generation plants have changed from coal fuelled to biomass. What effect has this had on emissions or where can one find an assessment of this?
A: No information regarding air pollutants. Information regarding CO_2 emissions follow this link (in Danish):
https://www.kk.dk/artikel/CO2-udledning-fra-k%C3%B8benhavn

Q: would you prefer to see collaborative applications?
A: Yes, indeed!

Q: Should the proposed solution be focused on Copenhagen or more general solutions are welcome?
A: They should focus on Copenhagen, but as many cities have the same challenges and structures as Copenhagen, *replicability* is a criterion in the evaluation of the applications as stated in the competition manual.

Q: Who operates Copenhagen's Intelligent Transport Systems (the one that controls the traffic signals at the city's 380 intersections)?
A: The ITS of Copenhagen is operated by the Technical and Environmental Administration. They run the city traffic light system – and set it up to have as smooth traffic as possible (to reduce emissions from idling cars). The regulation has to be coordinated with the police.

Q: Is the Pilot funded if you enter into it?
A: If the city decides to enter into a pilot with the winning solution, this pilot is funded under certain conditions by the city.

Q: Is there any citizen science project in Copenhagen using low cost sensors for air quality, and what are they measuring, NO_2, particles?
A: As far as we know there is no such project
.
Q: Are there any restrictions on domestic wood-burning for residential heating or decorative fires?
A: No, as this would be a national governmental decision.

Q: Does Copenhagen have a MaaS (mobility as a service) app/platform?
A: No, not as such at the moment.

Q: What is the planning on restricting/banning diesel cars in future?
A: Non-specific at the moment (and it is also a national governmental decision).

Q: What are the current bike-sharing services used in Copenhagen? Which of them are private or public?
A: As for now, we are having one public bike-sharing solution (Bycyklen/The City Bike, https://by-cyklen.dk/en/) and at least to private solutions; Donkey Republic and Swapfiets and many, many private companies, shops, hotels etc. that rent out bikes.

Q: How is the effectiveness of the Low Emission Zones (LEZ) assessed?
A: New LEZ for busses, trucks and vans in 2020.

Q: Is Aarhus University supplying air quality consulting services in terms of operational street level monitoring to the municipality?
A: Yes, see links above.

Q: Will finalists get access to attend the C40 summit events?
A: Finalists will be able to join the Open Innovation Day for this call, which is a side event for the C40 World Mayors Summit. For attending other event, check out the Live Like Tomorrow programme and the C40 World Mayors Summit website.

Q: Can finalist use this award for promotion/marketing activities?
A: That would probably be a good idea!

Q: Do we have to present a feasibility analysis?
A: You are not entitled to, but it would probably give your application a better chance.

Q: How many air pollution fixed-site monitors are in the city and which pollutants do they measure?
A: Three monitors, air pollutants mentioned in the EU air quality directive. http://envs.au.dk/vi-denudveksling/luft/maaling/graensevaerdier/ (in Danish) All air polutans for EU-materials list

Q: Who are members of judging committee?
A: A combination of high-level city representatives and decisionmakers, international design-, architect- and engineering companies as well as experts within behaviour and from academic domains.

Q: How do you rank competitors?
A: The submissions are being evaluated as stated in the competition manual using the listed criteria based on the City of Copenhagen's overall aim of the open innovation call.

Q: Can we find a solution which aims at changing people behaviour rather than "invent" a real product?
A: We very much welcome that.

Q: Could you please provide a link with the % of people using each transport mode (e.g. car, bus, walk, mo-torbike, private bike, public bike...)?
A: https://kk.sites.itera.dk/apps/kk_pub2/index.asp?mode=detalje&id=1962