

Pilot test in the Metropolitan Area of Barcelona (AMB) and Activity 6.6 Citizen awareness campaigns by mobile apps

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Pilot Test in AMB



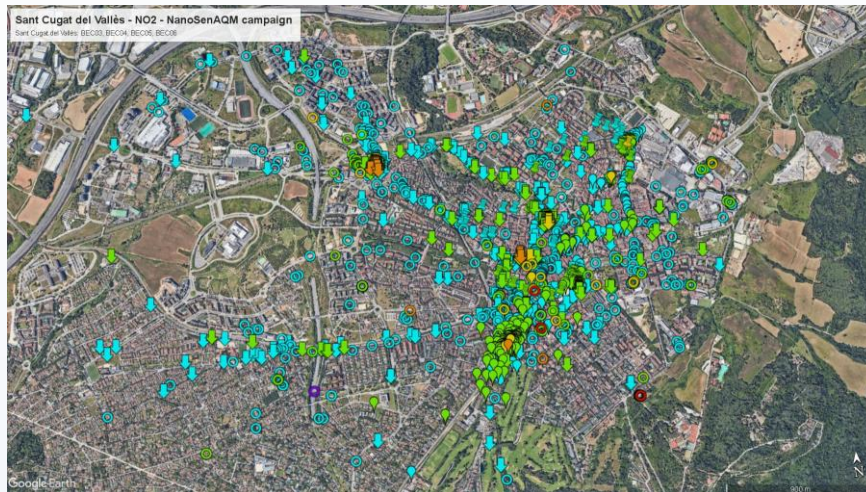
Ajuntament de L'Hospitalet



Ajuntament de Sant Adrià de Besòs



Results NO₂

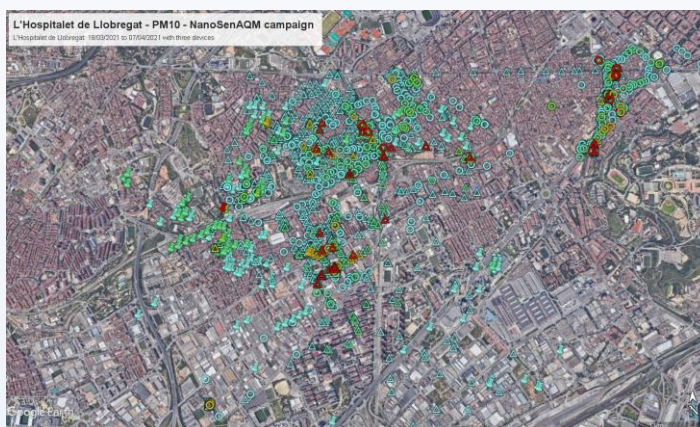
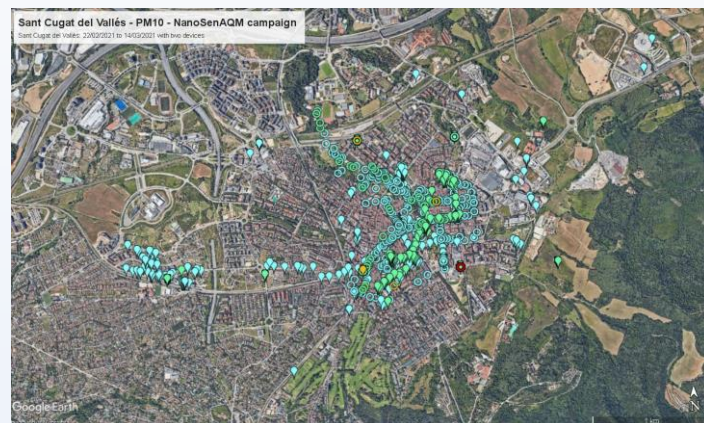
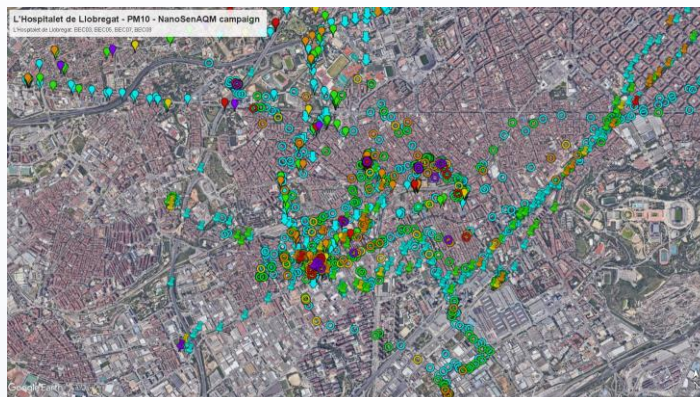
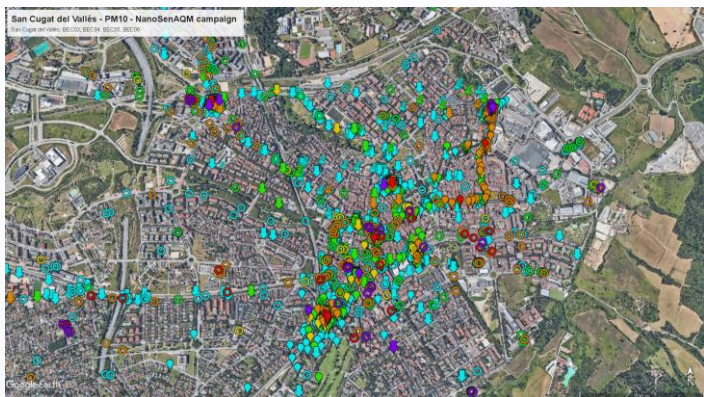


SO ₂		PM _{2,5}		PM ₁₀		O ₃		NO ₂		CATEGORÍA DEL INDICE
0	100	0	10	0	20	0	50	0	40	BUENA
101	200	11	20	21	40	51	100	41	90	RAZONABLEMENTE BUENA
201	350	21	25	41	50	101	130	91	120	REGULAR
351	500	26	50	51	100	131	240	121	230	DESFAVORABLE
501	750	51	75	101	150	241	380	231	340	MUY DESFAVORABLE
751-1250	76-800	151-1200	381-800	341-1000	EXTREMADAMENTE DESFAVORABLE					

Higher concentration due to:

- the mobility associated with commuting
- the heavy presence of industrial parks
- narrow streets with tall buildings on both sides does is make it difficult for pollutants to scatter in the air

Results PM₁₀



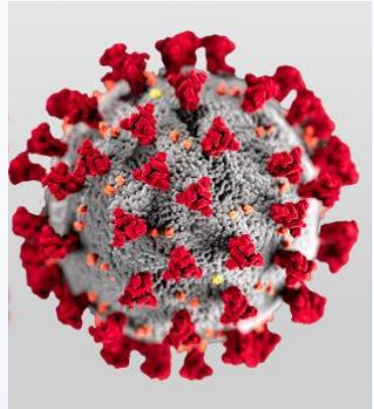
PM10		O ₃		NO ₂		CATEGORÍA DEL ÍNDICE
0	20	0	50	0	40	BUENA
21	40	51	100	41	90	RAZONABLEMENTE BUENA
41	50	101	130	91	120	REGULAR



Higher concentration due to:

- influence of mobility in traffic routes
- construction work
- the effect of earth moving due to construction work
- the presence of loose soil in the area.

Other low cost sensors

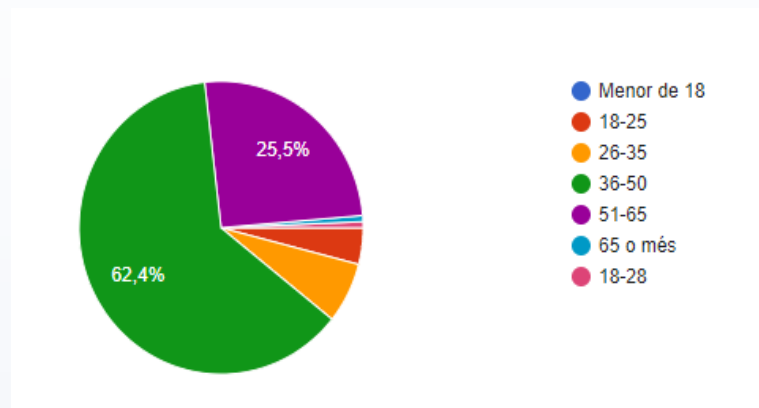


Campaigns through survey citizens: results

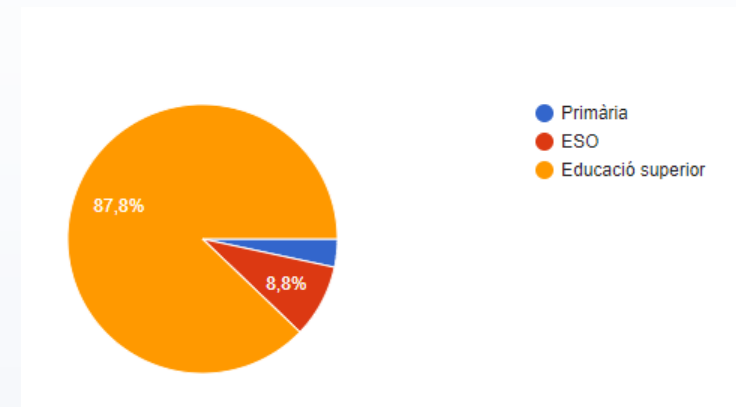


[Enquesta QA - Àrea Metropolitana de Barcelona \(amb.cat\)](https://www.amb.cat/enquesta-qa)

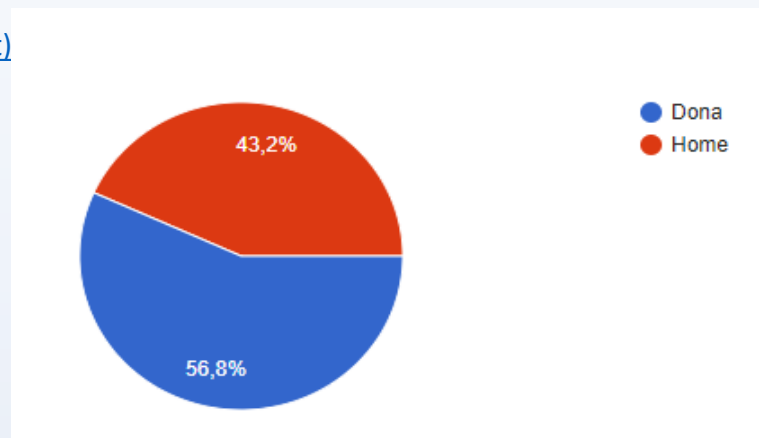
Age



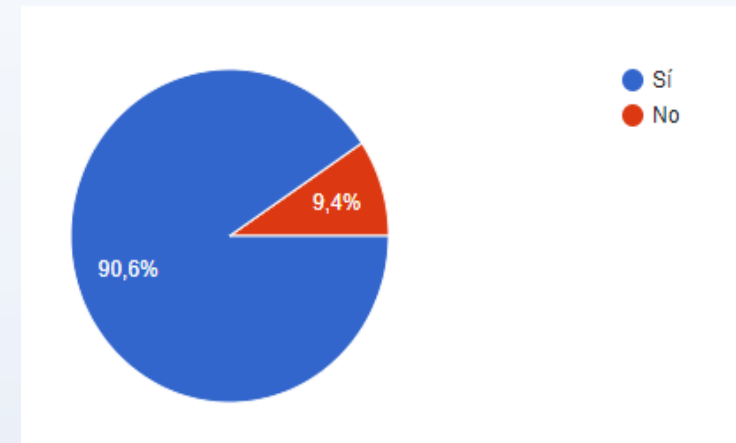
Education Level

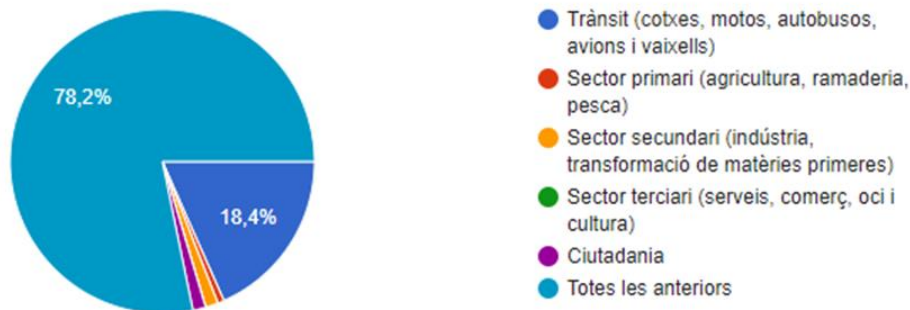
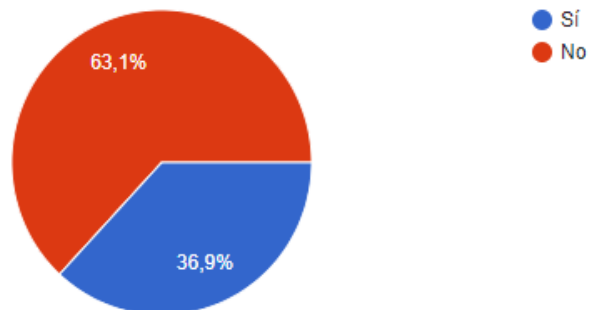
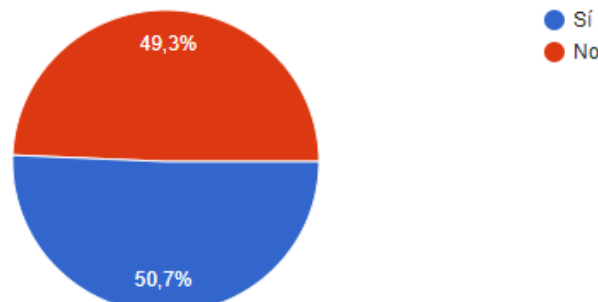
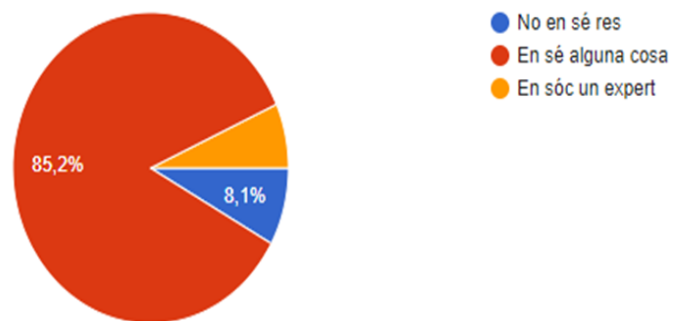


Gender



Employment Situation





Conclusions

About low cost sensors:

- More projects like Interreg Sudoe NanoSen AQM are needed to improve sensors that measure air quality anywhere, anytime.
- Contrast the traceability between the prototype sensors and the commercial sensors and the calibrations of these contrasted with the official measurement stations.

About awareness and education citizenship:

- The survey shows that pedagogy should continue on some aspects related to air quality, such as the difference between “emission and immission”, since 63% affirm that they do not know this difference. The most frequently mentioned pollutants are NOx and PM10.
- Highlights the need for the citizens to be informed and take advantage of the educational resources in place which exist precisely to raise awareness about air quality and related environmental issues.
- It is recommended to continue developing communication and pedagogical resources to bring technical concepts about air quality closer to the general population.

Thank you for your attention!

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