

3.5% of world CO2 emissions come from the aviation industry
(1.04 billion tons) ...And it's set to **Double** by 2050

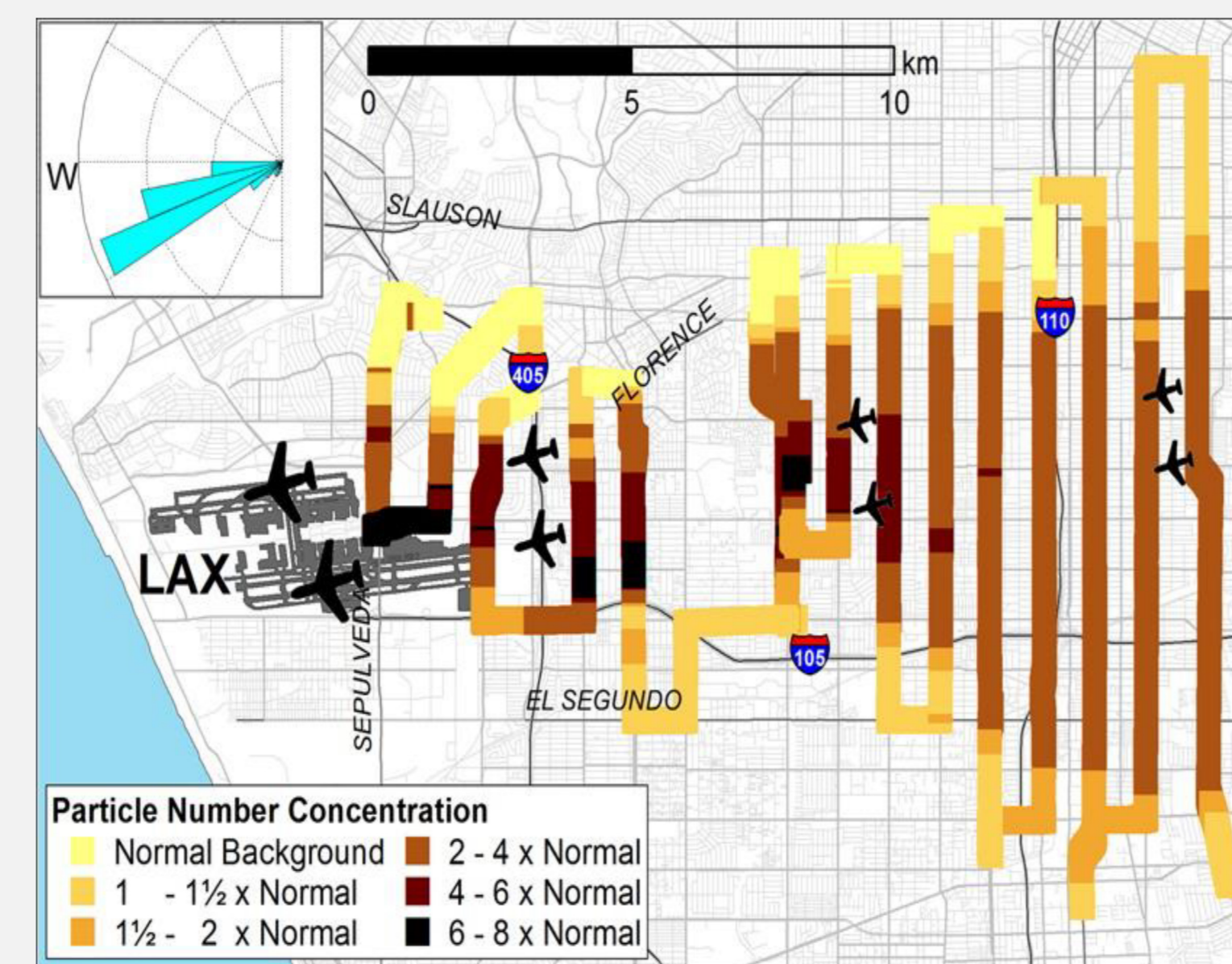
Goal: Investigate the industry's pollution **Raise** awareness of the problem **Find out what WE can do**



Case Studies

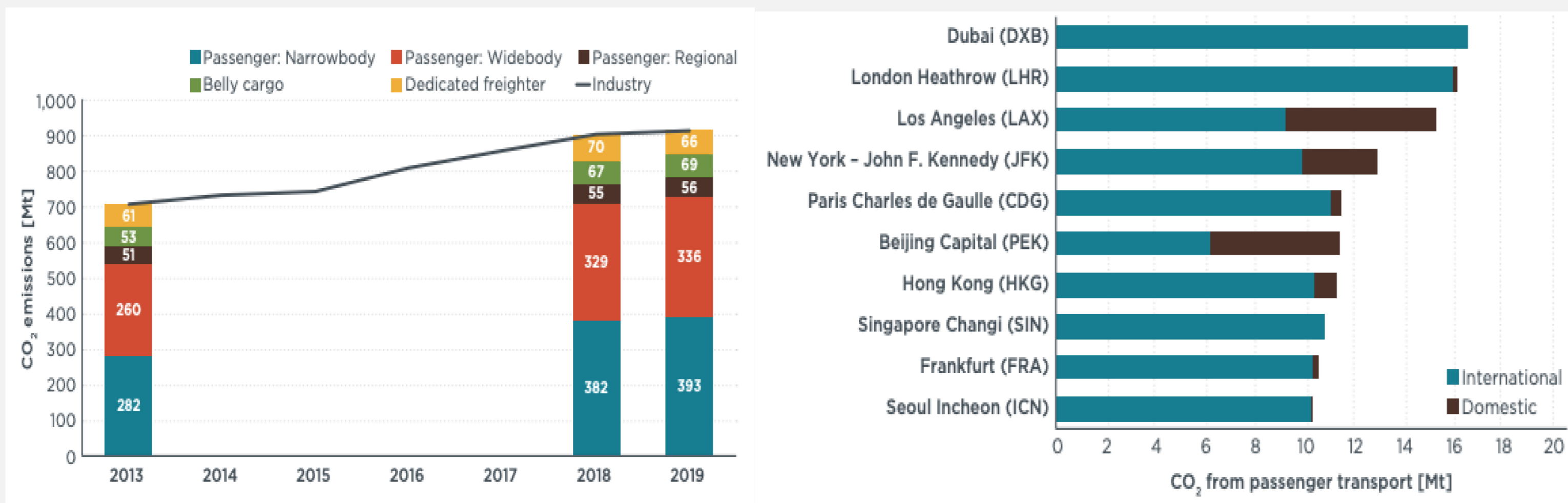


"Winthrop Resident Josephine Fatta stands next to the air monitor in her backyard and points towards Boston Logan International Airport" from WGBh News. CC-BY Craig Le Mout



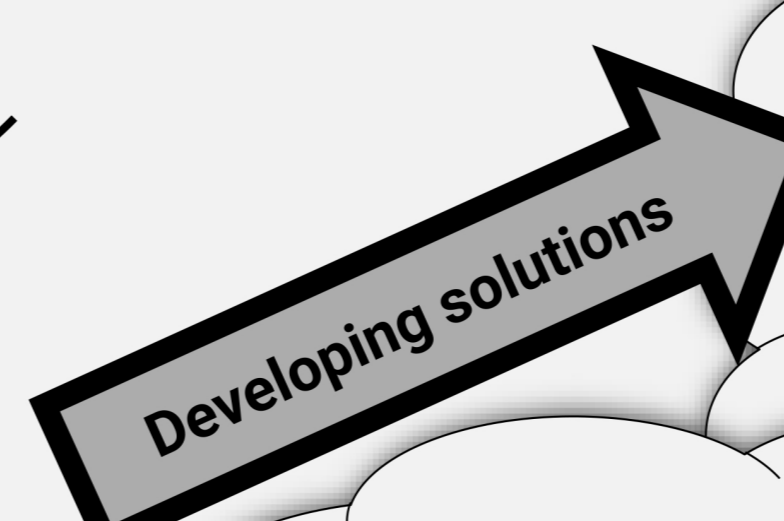
Areas directly underneath flight paths have higher concentration of CO2 in Los Angeles affecting these communities. This is not unique to Los Angeles From cen.org CC-BY Environ. Sci. Techno.

Data



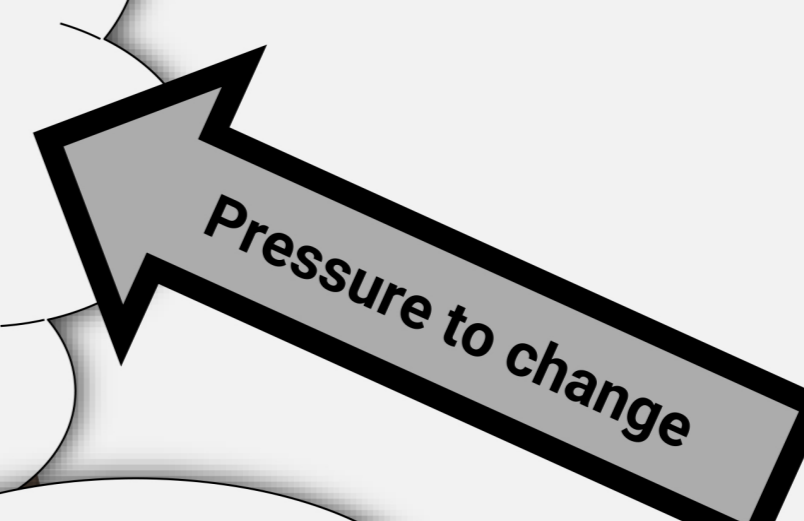
Innovation at WPI

Information



Raise Awareness

Information



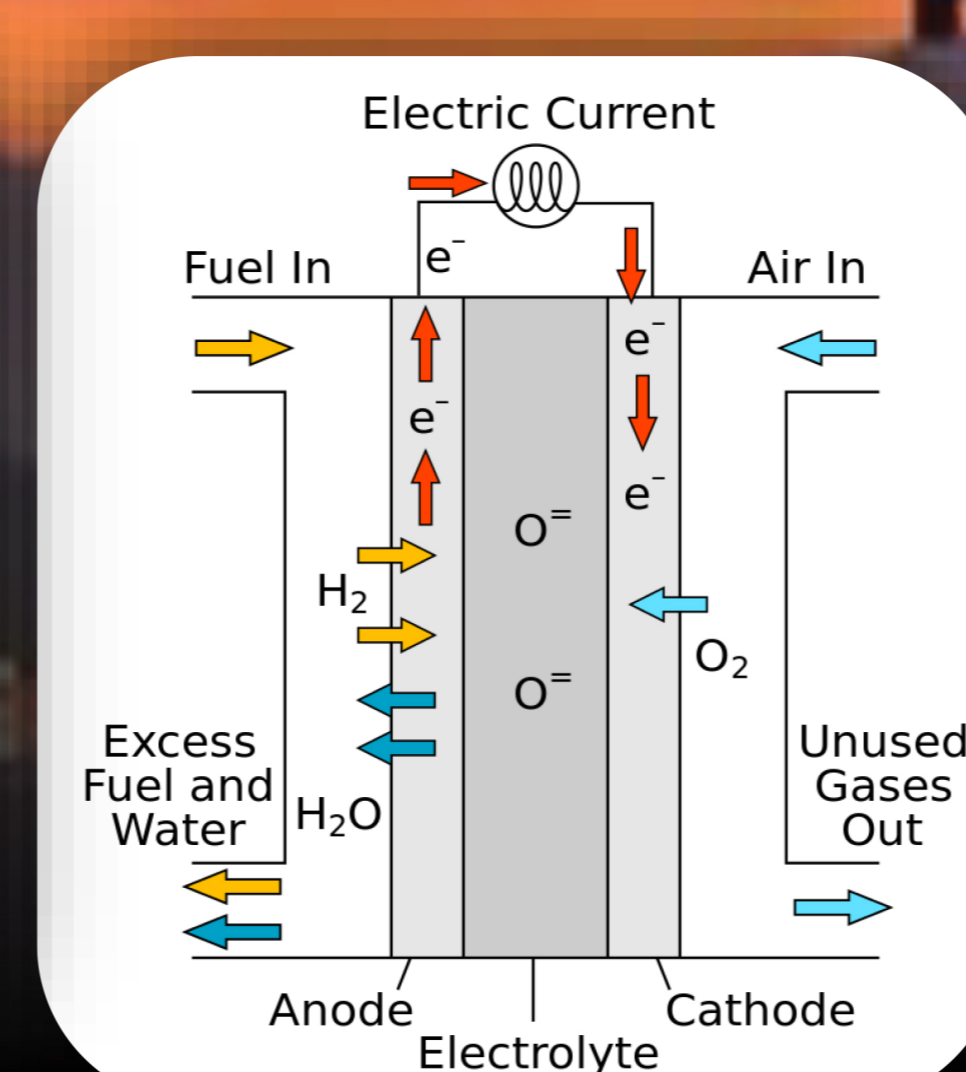
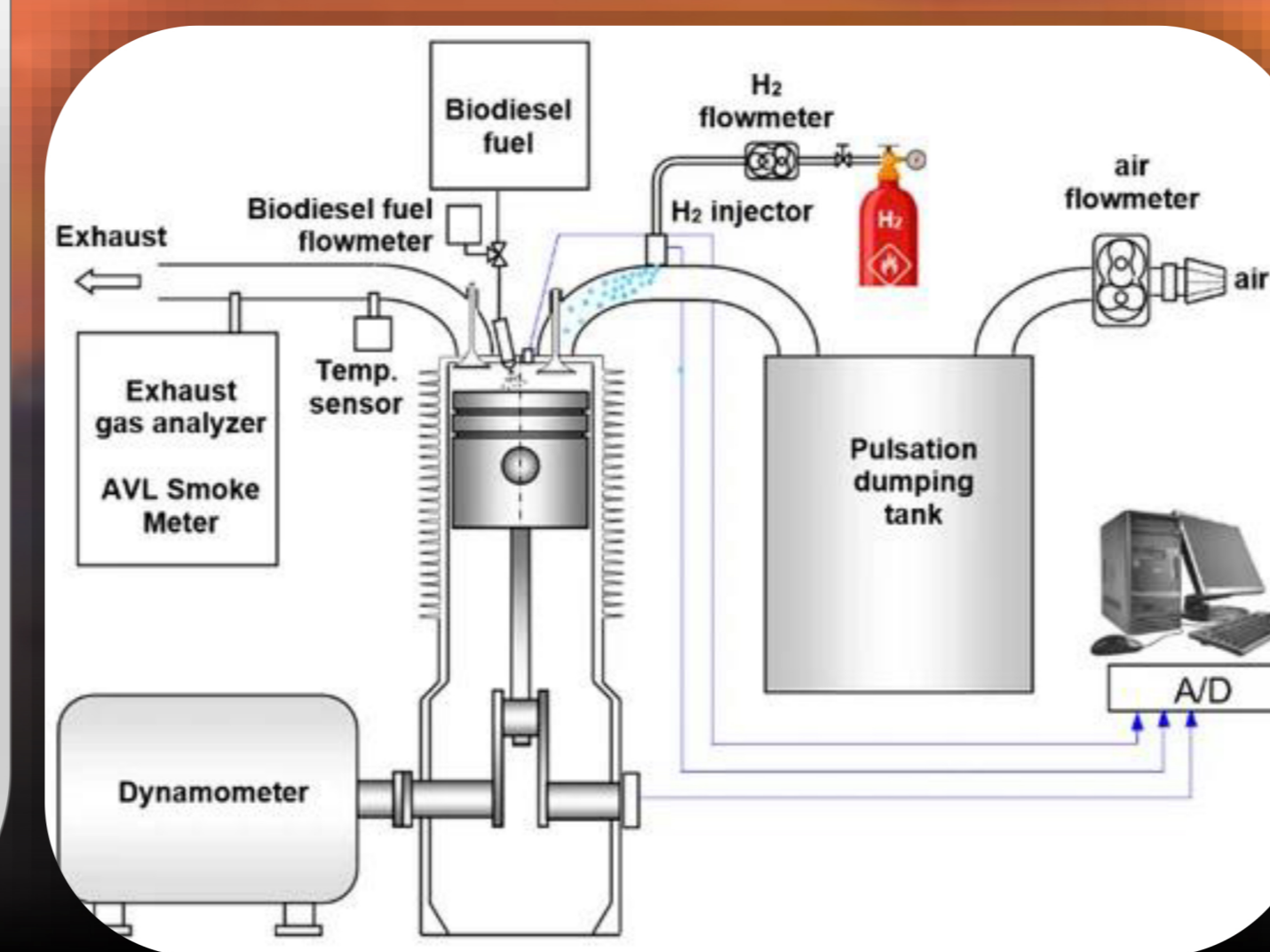
Solutions

Developing Solutions

Biofuels	Hydrogen
50-80% less CO2 emissions, "Net 0"	0 CO2 emissions
Nearing mass production	Still in development

Regulatory Changes

- Sacrifice Profits for green efficiency
- Tighten international regulations across the world



References

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6. Tutak W, Grab-Rogaliński K, Jamrozik A. Combustion and Emission Characteristics of a Biodiesel-Hydrogen Dual-Fuel Engine. *Applied Sciences*. 2020; 10(8):1082. <https://doi.org/10.3390/app10031082>
7. We would like to acknowledge Nausher Khan for providing a substantial amount of information surrounding his company and about the aviation industry itself.