

A giant, fake beached whale reeking with the stench of rotten fish served as public art commentary in Baku. Photo: Cara Horowitz

Some have described the United Nations Climate Change Conference (COP29) in Baku as "challenging," "ineffective," and "disappointing." On the one hand, global greenhouse gas emissions have reached an all-time high, and the temperature for 2023 is the highest ever recorded. On the other hand, President-elect Donald Trump announced his intention to withdraw the U.S. from the Paris Agreement again. Meanwhile, President Javier Milei withdrew the entire Argentine delegation from the summit, covering everything with a cloak of doubt and pessimism. Having been on the ground in Dubai last year and now in Baku for side talks on advancing methane regulations as part of the UCLA Emmett Institute's delegation, I can confirm the atmosphere at COP29 was strange. When we encountered an art installation of a fake whale stranded on land, it was easy to see the metaphor for the climate talks as a whole. The United States delegation tried to convince attendees with a hardly believable motto: "America is All In." The truth is that America will likely be "all out" from future negotiations. Yet, all is not lost. There was some promising news regarding methane emissions. More countries have joined the Global Methane Pledge, and nearly 100 countries have developed national methane action plans. Governments and philanthropies

mobilized over \$2 billion in grant funding for methane reduction, and new policies and regulations have been implemented to reduce methane emissions from the oil and gas and waste sectors. This COP was also the place for impressive announcements of significant progress on methane emission monitoring. One of these examples comes from the Californian-based conglomerate Carbon Mapper, which launched its first methane-detecting satellite. During COP, CM released over 300 initial global detections across diverse sectors to its public data portal. Additionally, Carbon Mapper is the first third-party notifier applicant to the U.S. EPA's Super Emitter Program -a program that we hope will survive the current political turbulence. MethaneSAT, a branch of EDF, also recently launched a satellite that can monitor and quantify global methane emissions over wide areas from the oil and gas sectors. At COP 29, the organization unveiled new data mapping and tracking emission rates in key regions of North America, Central Asia, and South America. These breakthroughs were made possible by unprecedented support from private philanthropy, which reached an all-time high for methane abatement projects. Satellite-borne methane monitoring devices have proven their value in detecting methane emissions. However, it is crucial to consider incorporating these technologies into formal legal and regulatory frameworks that extend beyond inventory reporting and voluntary commitments. Due to the absence of robust regulations, many detected emissions have yet to translate into effective methane abatement measures. In response to this challenge, the Emmett Institute participated in COP29 with its "Advancing Methane Regulation" project. Our goal was to present an updated summary of methane regulations to understand how methane emissions are regulated worldwide and a science primer draft, which aims to explain the science of remote methane monitoring to policymakers so they can effectively comprehend and -hopefully- create or improve methane regulations by incorporating these technologies into their regulatory frameworks. Maybe the main contribution of this COP -ironically, the place for climate diplomacy- could be the certainty that relying on politics as the only solution is no longer possible. Advancements in the fight against methane emissions are a clear example that people, philanthropy, and committed organizations remain the hope against global warming. Civil society and the private sector have the greatest possibility (and responsibility) to implement significant climate actions without waiting for international agreements and push governments -national or subnational- to act accordingly. Fully private or public-private breakthroughs in methane monitoring are challenging how GHG emissions have been regulated to date; now, it's time for governments to make their share by allowing new alternatives to help solve old problems — like methane emissions — with new tools. In at least this respect, the future may not look so grim after all.