CONRY TECH

ANALYSING THE LANGUAGE OF CLIMATE CHANGE POLITICS

DATA ANALYSIS OF EVERY WORD SPOKEN DURING COP27 PLENARY SESSIONS

A study of the dialogue shaping the most important issue of our time, from the world's leading climate scientists and world leaders at COP27

FOREWORD

by Sam Ringwaldt,
Conry Tech CEO and co-founder

“Words matter. Words can signal our thoughts, biases, history, and even our future actions. In the context of world leaders discussing the most important issue of our time, climate change, the conversation is worth listening to intently. Our climate leaders’ words are chosen deliberately and often painstakingly. Their choices can be more significant than they first appear. As we saw in COP26 Glasgow, there is a big difference between whether we ‘phase out’ or ‘phase down’ fossil fuels. These kinds of agreements can have a significant bearing on whether nations can limit the rise of global temperatures above 1.5°C, as stipulated in the Paris agreement. What is said during an event like COP can signal where the climate action communities attention is focused, and therefore what is not said is also a key indicator of which issues may be missing from the public debate.

“Using the right words can help us explore complex issues in depth like the new loss and damage fund framework created at COP27. Meanwhile, spoken words can be vastly more powerful than written communications. It can help nations not commonly on the world stage communicate the strength of their feelings on the subject of climate change and how it affects their citizens.

“As a climate tech start-up focused on energy efficiency and conservation in the built environment, we want to understand how the subject of energy reduction and conservation features in climate change politics. We believe it is an essential part of reducing emissions and helping nations transition to renewable energy, yet we find that it rarely features in the prevailing conversations. When it is mentioned, it is typically only an afterthought.

“In our analysis we found that COP27 was dominated by the subject of finance over and above any other issue. The data also shows that renewables are far more prominent as a means of reducing emissions than energy conservation or efficiency. The extent to which growing electrical demands are outpacing the addition of renewables, and resulting urgent need for demand reduction is still missing.”

INTRODUCTION

Conry Tech downloaded and analysed the recordings of every COP27 plenary session between 6th and 20th November 2022. This includes the Opening ceremony, national statements, high level segments, SBSTA and SBI meetings. Speakers were typically national political leaders and climate scientists, including the likes of Al Gore, Alok Sharma, and COP27 President Sameh Shoukry.

Conry Tech transcribed more than 40hrs of COP27 presentations into a 230,000+ words text file and searched the transcript for keywords. The analysis should give readers a better understanding of how much time was devoted to each subject, or how regularly it was cited.

KEY FINDINGS

COP27 was dominated by economics – one in every 150 words was related to climate finance

There was a major emphasis on renewables and reducing emissions, as expected. However very little was said about energy conservation and efficiency. "Demand reduction" was not said at all at COP27

Electric cars, plastics and recycling barely featured in COP27 plenaries

Paris is still the dominant COP event/agreement discussed in 2022. It was mentioned every five minutes by delegates, far more frequently than references to Glasgow, Kyoto, Copenhagen, Madrid, Bonn, Montreal. Kigali agreement only referenced once

COP delegates emphasised damage being done to natural environment (mostly deforestation and ocean pollution), but did not focus on the impact of urban environments

Floods and droughts were the most common disaster scenarios cited by delegates, and many emphasised that climate change was a **"matter of life and death"**

"Phase out" said 15 times vs **"phase down" (2**), despite phase down being the final term used in the Glasgow COP26 formal agreement

The most regularly cited topical issues during COP27 plenaries were the war in Ukraine (116 times), COVID (92) and the energy crisis (16)

MOST COMMON WORDS

Below is a sample of some of the most common words and phrases spoken at COP27 plenaries.

Climate **2009**

Climate change **824**

Finance/Financial/Financing **728**

Adaptation **585**

Action **540**

Damage **423**

Implementation **417**

Paris **411**

Energy **375**

Development **328**

Loss and damage **320**

Emissions **302**

Mitigation **284**

Carbon **225**

Crisis **201**

Transition **194**

Developing countries **187**

1.5 degrees **185**

Sustainable **176**

Funding **147**

Impacts **146**

Vulnerable **143**

Renewable **136**

Climate action **132**

Greenhouse gas **100**

Nature **79**

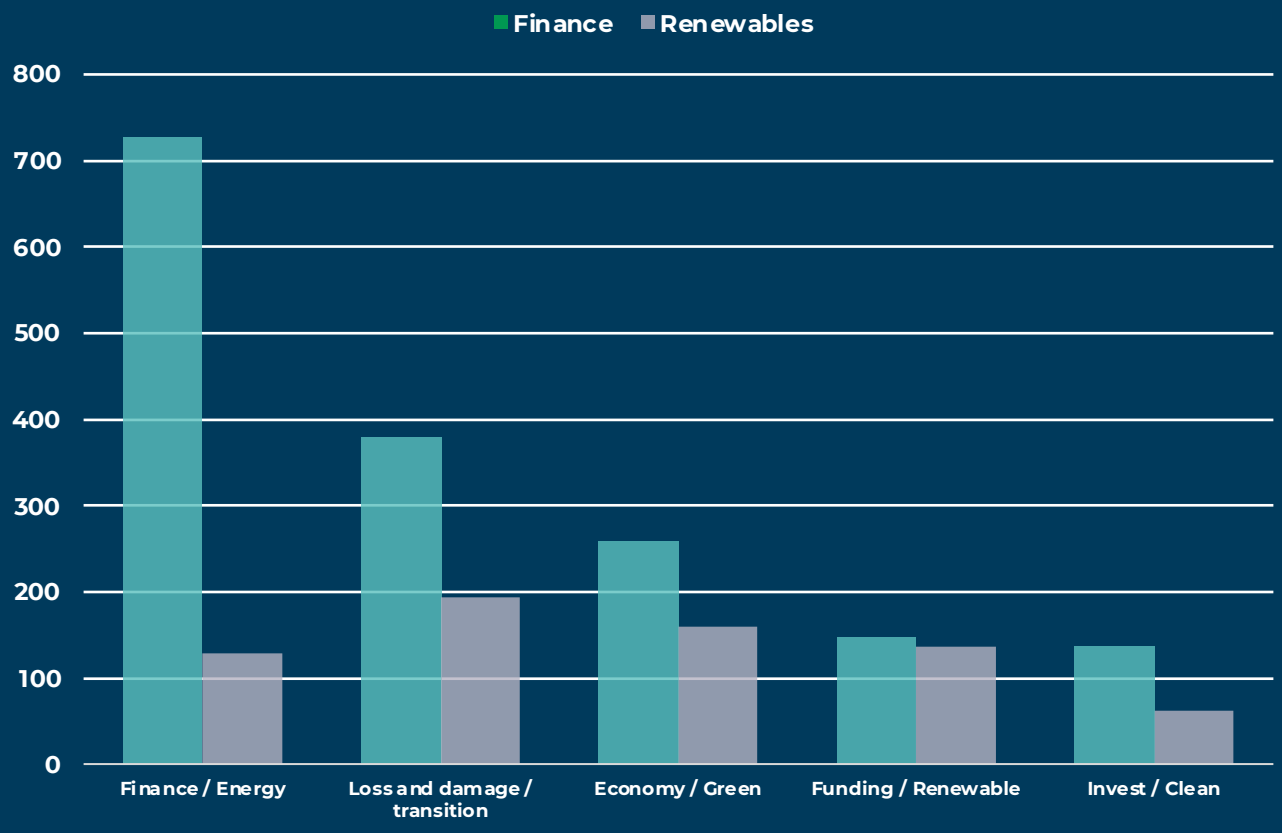
Climate justice **64**

WHY THIS WAS ‘THE MONEY COP’

Investment is always an important theme in COP meetings. However, the data analysis underscores the extent to which COP27 was dominated by economics.

Finance was mentioned 728 times in total during the COP27 plenaries, including all forms of the word (finance, finances, financial, financially, finances). Only the words ‘climate’, ‘change’ and general pleasantries such as ‘thank you’ were said more.

We estimate that one in every 150 words was related to climate finance. For a quick point of comparison, here five of the most common finance-related keywords that were used during COP compared to another high-profile subject, renewables.




Finance / financial
Loss and damage
Fund
Economic
Invest
Bank
Money

One of the key topics explored during the event was the creation of a loss and damage fund framework. For the first time ever, richer/high emissions nations have agreed to financially compensate developing nations in the event of climate related disasters or extreme weather events.

Sam Ringwaldt, Conry Tech CEO and co-founder

“There are two big benefits to the loss and damage fund. For poorer or developing nations, it means being compensated in the event that their economy, their citizens or their infrastructure is damaged as a consequence of the historic actions of others. This is a matter of fairness and it evens the global playing field.

“Secondly but potentially more significantly, the new reparations framework makes emissions reduction an act of self-interest, not global virtuosity. By making richer nations financially culpable for the impact of their emissions, climate action becomes a simple cost/benefit exercise for the first time ever. Until now, maintaining the status quo has nearly always been the most cost effective solution. However, the scale of a future loss and damage claim could be prohibitively expensive. This aligns economics with climate action, by incentivising richer countries to eliminate emissions effectively now, so they don’t pay more later.”

“Energy conservation and efficiency efforts would provide the fastest and cheapest method of mitigating current levels of emissions, as reduced demand on the grid would allow renewables already online to represent a larger percentage of total energy supply. Therefore a focus on technologies, such as Conry Tech’s, could allow nations to limit the total funding they will eventually have to pay in compensation.”

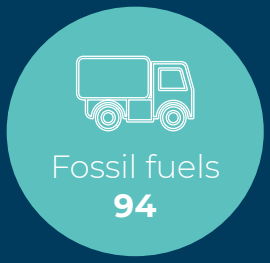
CAUSES OF CLIMATE CHANGE

It's valuable to understand how COP delegates choose to communicate the causes of man-made climate change. We tracked the mentions of several common human actions and consequences of the industrial world that are known to be ruinous to our planet. The need to transition to renewables to reduce their harmful emissions/ greenhouse gasses was a key focus.

The impact and global reliance on fossil fuels dominated COP discussions, as did the subject of how we reduce their harmful emissions/greenhouse gasses. Meanwhile a subject like plastic pollution rarely featured despite being a key environmental issue since the very first COP meeting. Indeed, recycling was barely mentioned at COP27 at all.

This goes to show the priorities of COP climate scientists and world leaders are focused on national and international interventions, not individual environmental actions like recycling or the uptake of electric vehicles. Indeed, EVs were barely mentioned at COP27, despite being a prominent environmental issue in the media and in the public consciousness.

We can say with confidence that COP27's core goals, as reflected by our word data analysis, are centred on the reduction of global emissions and phasing out fossil fuels. Interestingly, after heated debate in the aftermath of COP26, "phase out" was said 650% more often than "phase down" during the COP27 plenaries, despite the latter featuring in the Glasgow climate conference agreement.

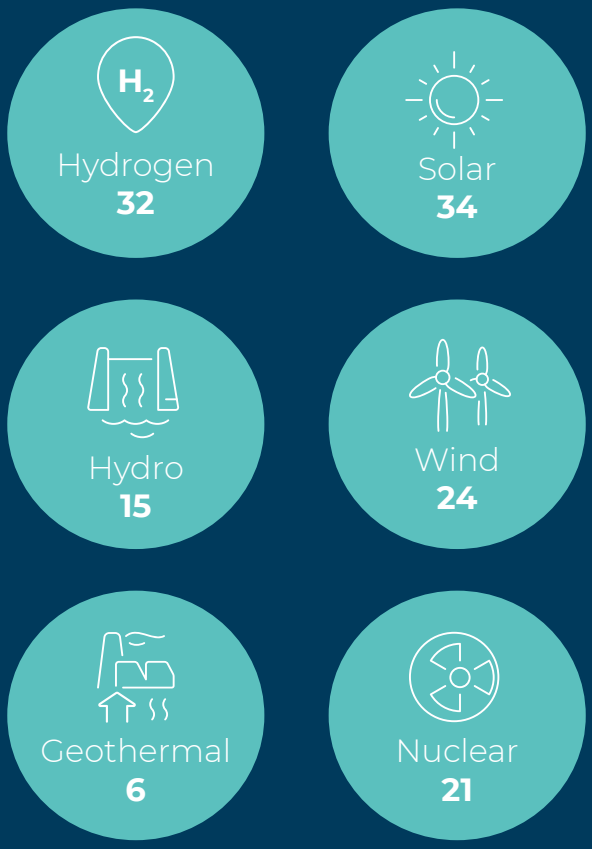


RENEWABLES REMAIN IN THE SPOTLIGHT

The need to transition to renewable energy was a major talking point at COP27. It is an essential element of climate change action. The data suggests that the focus of COP conversation tilted more towards renewable energy vs the elimination of emissions/CO_2, or energy conservation.

The term “renewable/s” was said 136 times by COP plenary delegates, far more than the likes of net zero (48 times) or energy efficiency (26 times). Of renewable energy sources, solar was the most regularly cited, which is a testament to the success of photovoltaic technology and solar projects worldwide.

The future of green/low-carbon hydrogen was also a major talking point at COP27. Hydrogen has its drawbacks many would argue that hydrogen investments since 2000 have largely failed to deliver, but clearly COP27 delegates believe it is a topic and technology that should remain at the centre of international climate action conversations.



NO TRANSITION WITHOUT ENERGY EFFICIENCY

While the creation of renewable energy is vital, it is important to remember that there is no global energy transition to renewables without energy conservation and the elimination of energy from the grid. The "Energy Hierarchy" created by the Institute of Mechanical Engineers is a framework to guide sustainable energy policy and decision-making. It proposes that energy demand reduction is the most cost effective and sustainable approach to energy policy.

However, phrases related to energy efficiency were only mentioned 46 times in the whole of COP27 plenary sessions. There was no use of the phrase “demand reduction”, despite it being a common term in climate discussions usually. This is evidence that COP events are far more intent on reducing emissions through greener energy sources, rather than attempting to lower power consumption, thereby reducing the underlying cause of emissions.

The data suggests that governments remained focused on adding renewable capacity to enable them to “phase out” fossil fuels and to transition to clean energy. The absence of discussion on the importance of energy conservation and energy efficiency in enabling this transition highlight the lack of a holistic approach to the problem, which concerning will extend the time frame for the clean transition to be accomplished.

MOST SUSTAINABLE

TIER ONE:
Energy Demand Reduction

TIER TWO:
Energy Efficiency

TIER THREE:
Utilisation of Renewable, Susaintable resources

TIER FOUR:
Utilisation of Other, Low-GHG-Emitting Resources

TIER FIVE:
Utilisation of Conventional Resources as we do now

LEAST SUSTAINABLE

“It’ll be impossible to replace fossil fuels with renewables by 2050, unless we cut our energy consumption”

A.Prof. Mark Diesendorf, UNSW Sydney

Current renewable energy capacity is not enough to meet our current energy needs. Meanwhile, urbanisation continues to accelerate. We are electrifying more of our day-to-day lives (cars, heating, cooking), while data demands also continue to grow apace (streaming, IoT, and data centre growth). Humans will need to create even more clean energy to sustain our future energy demands, unless more attention is devoted to energy efficiency.

Sam Ringwaldt, Conry Tech CEO and co-founder

“To help their nations fully transition to clean energy, global leaders need to focus more effort and investment into energy conservation and efficiency. We need to think about new ways to remove energy from the grid and make the most energy intensive parts of the built environment more efficient. Air-conditioning is a perfect example. It uses 60% of a commercial building’s electricity, and 10% of global electricity consumption, but is never discussed as an emissions problem to be solved. The reality is that it is a big issue that governments and businesses could easily solve. However, the situation is likely to get worse before it gets better. The IEA estimates that global demand for cooling will triple by 2050. The majority of buildings in hot countries such as India, China, and Brazil are not currently cooled by AC, but demand in these rapidly emerging economies is skyrocketing.

“There is a lot of room for improvement in energy conservation and energy efficiency, with many Gigawatts able to be saved. It would be both cheaper, and faster, to reduce the total grid consumption than it would be to add new renewable power generation to cover the extra energy demanded.”

CONSEQUENCES OF CLIMATE CHANGE

"A MATTER OF LIFE AND DEATH FOR THE WHOLE WORLD"

How humans have changed and damaged the natural environment was a constant theme during COP27. Delegates made frequent references the impact of man-made climate change, pollution, and the destruction of natural habitats.

The damage being done to forests was the most regularly cited ecosystem among delegates, including references to fires, deforestation, and the urgent need for forest preservation. The impact of climate change on our oceans/rivers was also a common theme, with conversation centred on protecting aquatic biodiversity by reversing rising ocean temperatures and acidification, as well as limiting pollution.

It is clear that there is a growing emphasis around nature based/positive solutions, and that nature must be considered as a primary force in any efforts to mitigate climate change. Nature is both being impacted by climate change, and is also one of our best allies which can both inform and support mitigation efforts.

THE BUILT ENVIRONMENT IGNORED

As for urban, suburban, commercial, and rural environments, the data shows that farming and agriculture received far more attention than towns, cities, and the built environment.

Several government agriculture ministers and experts were invited to speak at COP27, and there was a clear message that agriculture is feeling the full impact of climate change. As such, the focus on these issues is no surprise. However, we believe that the contribution towards climate change of high-density towns and cities warrants further attention at future COP events – given that 54% of the global population are living in cites.

Agriculture/ Farmland
158

Towns/Cities
51

Sam Ringwaldt, Conry Tech CEO and co-founder

"It is a shame that urban living and the impact of the built environment received so little attention at COP27, especially given recent extreme weather events and floods in major cities. The built environment is a major environmental problem. Cities are big polluters, and major cities in countries like Australia could become increasingly difficult to live in as global temperatures rise. As extreme weather events have become more common, parts of Australia are now impossible to insure. It is forcing residents to leave their homes, or risk everything they own in order to stay."

DEATH AND DISASTER

As well as indicating the priorities of COP delegates, their choice of words also communicates the human emotion and personal impact of climate change. In regards to the damage being done to both natural and built environments, the most common disaster scenarios and extreme whether events cited by delegates were flooding and drought. The severe flooding in Pakistan was mentioned regularly by delegates, a severe weather event that is estimated to have affected 33 million people, which will be felt by communities for several generations.

Indeed, death was mentioned 10 times by COP27 plenary delegates, which underscores the seriousness of the issue and the strength of feeling in the room. Several delegates said climate change was a matter of life and death and other phrases to this effect.

“This has been a year of climate disasters and climate deaths”

“Climate change is a slow death sentence”

“A matter of life and death for the whole world.”

Meanwhile Satyendra Prasad, Fijian ambassador to the UN, made this heartfelt plea to his fellow delegates on behalf of Fiji and many developing nations that are feeling the disproportionate impact of climate change.

“With hell on the horizon, we are told to trust a driver, who we can see is blinded by greed and deaf to our pleas. Our nations are the most exposed.”

His Excellency Mr Satyendra Prasad, Ambassador and permanent representative of Fiji to the UN.

WE'LL ALWAYS HAVE PARIS

Despite taking place in Sharm-el-Sheik, another city dominated discussions throughout COP27. COP21 in Paris was arguably the most memorable and significant COP event to date and is still high on the agenda. In total, the Paris Agreement was mentioned a remarkable 410 times – once every five minutes during the 40+ hours of plenary sessions recorded and available on the COP site for download.

Paris was mentioned more than twice as often than the most recent COP meeting last year in Glasgow (161 mentions). Other previous COP events and agreements that usually dominate climate discussions include Kyoto (54), Copenhagen (9) and Montreal (5), were only secondary talking points at COP27.

It is telling that the Kigali amendment to the Montreal protocol was only mentioned once during COP plenaries despite its recency and importance. The amendment came into force in 2019 and is estimated to cancel up to 0.5°C of global temperature rises by the end of the century. Considering that the 1.5°C limit was a major talking point at COP27, it could be seen as a surprise that Kigali didn't feature more highly. However, perhaps this underscores the success of climate action on hydrofluorocarbons (HFCs). HFCs were not widely discussed because international climate scientists and global leaders believe that they have found a successful approach to solving the issue. Indeed, Ozone layer depletion no longer features regularly in COP discussions, and was only mentioned a couple of times during COP27 plenaries. It's notable that the 34th Meeting of the Parties (MOP 34) to the Montreal Protocol received minimal global media attention when compared to COP27, where non-climate sustainability issues are discussed at greater length including Ozone depletion, energy efficiency and greenhouses gases.

TOPICAL TRENDS

Although COP events can feel like a bubble for people in the industry, climate change action does not exist in a vacuum. Indeed, the background to COP27 is a reminder that global climate change leaders are trying to implement change in incredibly turbulent times.

Aside from sustainability issues, the most regularly cited topical issues during COP27 plenaries were the war in Ukraine (116 times), COVID (92) the energy crisis (16) and the cost-of-living crisis (4). I think this underscores the extent to which climate change is not a scientific issue that exists in a vacuum. Global events such as the COVID-19 pandemic and subsequent economic damage can slow the progress of climate funding as countries re-allocate their resources to healthcare, hospitality and other areas of their economy which may be suffering. Meanwhile events such as the war in Ukraine has prompted allied nations to push harder for renewables and a more rapid transition of their energy grid, to decrease their reliance on foreign gas/oil.

CONCLUSION

“COP events are a remarkable demonstration of international cooperation and diplomacy where the world’s leaders and finest scientific minds meet to discuss the biggest issue of our time.

“COP27 will be remembered for keeping the 1.5°C commitment alive, and for the creation of the historic loss and damage fund framework. In both respects, it’s hard to argue that COP27 was anything other than a landmark event for international climate change action. Not only does this put high emissions nations on the hook for the financial impact of climate change, it makes mitigation the more cost-effective option in the long term, compared to reparations. I think it will prompt nations to move their emissions reduction timelines forward.

“Looking ahead to future COP events, I would like to see more conversation on the topic of the built environment. We cannot ignore the damage being done to the natural world, but more than half the global population already live in cities – a figure that continues to rise. Our cities are big polluters, with people, cars, offices, industrial and commercial buildings all squeezed together. We are developing ways to electrify transport and decrease emissions on our roads, but most cities and the buildings within them were never designed to be energy efficient. There is some low hanging fruit in the built environment that can remove a lot of energy from the grid, lower emissions, and help countries transition to a renewable energy grid far sooner.

“As well as the damage and loss fund, leading nations like Australia should also take up the mantle of leading the development of innovative technologies, and ensuring such technologies are accessible, affordable, and deployable for developing nations to ensure they don’t repeat all our mistakes. Providing climate tech hardware, such as advanced air conditioning systems to these nations could ensure that their emerging cities can have a smaller environmental impact than most of the existing cities in the developed countries. This may also require financial assistance, but could dramatically reduce the need for future demand reduction and efficiency exercises if done correctly from the outset with technologies that are only just now being adopted in the developed nations.

“Conry Tech is a climate tech, green building HVAC innovator founded by award winning experts in this field. We believe that to achieve a more sustainable world powered by renewables, energy conservation and energy efficiency must remain the highest priorities.

“Traditional air-conditioning systems take 60% of a buildings total power, and the industry has barely changed in more than 100 years. Current systems consume too much energy, burn fossil fuels, and rely on refrigerants with high global warming. Our team is reinventing air-conditioning to make comfort sustainable, slash emissions, conserve energy, decarbonise the built environment and enable a rapid transition to clean energy.”

CONRY TECH

Conry Tech's mission is to disrupt the heating, ventilation and air conditioning (HVAC) industry, making comfort sustainable by delivering on the following objectives.

01.

Reduce a buildings total energy usage by >40%, pushing it towards net zero and reducing the load on the power grid enabling a more rapid take up of renewable power options.

02.

Air conditioning that is designed from the outset to harness clean energy, provide grid demand response capabilities, eliminate fossil fuels, and slash carbon emissions.

03.

Air conditioning that can provide an unprecedented level of flexibility and control for both tenants and building owners, that reduces CAPEX, OPEX, and wasted energy.

04.

A system that improves indoor air quality throughout the building and prevents the spread of airborne contagions such as COVID-19, actively eliminating viruses locally.

"Investing in more efficient air conditioners could cut future energy demand in half."

International Energy Authority.

Invest in us

Join our team