**Transcript**

**Emmanuel Kattan, Host**: This is “Vis à Vis”, a new podcast series brought to you by the Alliance Program at Columbia University. "Vis a Vis" features conversations that challenge our understanding of key global, economic and social issues by casting them in a transatlantic perspective. I’m Emmanuel Kattan. I head the Alliance Program, a partnership between Columbia University and 3 French universities: Sciences Po, Paris 1 Panthéon Sorbonne and École Polytechnique. Every episode, I sit down face to face – or as we say in French, “Vis a Vis” – with some of the most insightful thinkers on both sides of the Atlantic. I hope you enjoy our conversation.

(Theme music out)

**Kattan**: Welcome to all of you. Tonight's panel is entitled Climate Change: Towards a New Paradigm. Today more than ever, climate change and its effects are in the news. On the one hand, what we learn is a constant cause of alarm. The number and the intensity of hurricanes is on the rise. Forests the world over are decimated by wildfires. And communities in low-lying lands like Bangladesh are devastated by floods. Many countries are not keeping up with their zero-carbon commitments. And investments in fossil fuel continue. Just today, we learned that the U.S. administration will probably move ahead with an $8 million drilling project in Alaska. But perhaps we should also draw comfort from the news coverage on climate. It's a sign that the threat of climate change is being taken seriously, increasingly, by a large part of the population. And there are some positive developments, too. The U.S. is back in the climate agreement. The COP 27 recently led to a breakthrough loss and damage funding to support developing countries suffering the worst effects of climate change. There are 2,000, at least, climate-related court cases today, and some companies are making good on their ESG commitments. So does this amount to a real shift? Have we finally reached a tipping point in our collective determination to fight climate change? Will historians of the future say the 2020s was the decade where humanity started walking away from the precipice? To disentangle those questions, we were privileged today to have a powerful panel of thinkers and experts. Let me introduce you to them very briefly.

Professor Joe Stiglitz, you're a professor at Columbia University. You're the co-chair of the High-Level Expert Group on the Measurement of Economic Performance and Social Progress at the OECD and the Chief Economist at the Roosevelt Institute. You were awarded the Nobel Memorial Prize in Economics in 2001. Your accomplishments are too many to cite, but you are the author of numerous books, including most recently *People, Power, and Profits*; *Rewriting the Rules of the European Economy*; and *Globalization and Its Discontents Revisited*.

Professor Laurence Tubiana, you are the CEO of the European Climate Foundation and a professor at Sciences Po. Before joining ECF, you were France's Climate Change Ambassador and Special Representative for COP 21, and as such, a key architect of the landmark Paris Agreement. From 1997 to 2002, you served as Senior Advisor on the Environment to the French prime minister, Lionel Jospin. You founded in 2002 the Paris-based Institute of Sustainable Development and International Relations.

Mireille Chiroleu-Assouline, you are a professor at Paris 1 Panthéon Sorbonne University and at the Paris School of Economics. Your research and expertise are in environmental economics, taxation, and its economic effects; policies for curbing greenhouse gases; corporate social and environmental responsibility; and po- and the political economy of the environment.

And finally, last but not least, Professor Patricia Crifo. You're a professor of economics at École Polytechnique. You are also an associate research fellow of CIRANO in Montreal, of the Institut Politiques — des Politiques Publiques and the Institut Louis Bachelier. At École Polytechnique, you are the director of the MscT Economics for smart cities and climate policy, the research initiative for sustainable finance and responsible investment, and deputy director of Energy4climate, the interdisciplinary center.

Professor Stiglitz, let me turn to you first. And let's start with probably one of the biggest questions today concerning the developing world. We know that climate change has a disproportionate impact on poor countries. For example, 95% of victims of natural disasters are in developing countries, and the cost of these disasters to those countries is 20 times higher than for rich countries. Last November, the COP 27 conference concluded with the historic decision to establish loss, a loss and damage fund to help developing countries cope with energy transition. What impact will this decision have on developing countries? And do you think that it will succeed somehow in creating a level playing field between rich and poor countries?

**Joseph Stiglitz**: So first, let me say, what a pleasure it is for me to be here. Now, as an economist, I hate to say it's all about money. It's not all about money, but money is really important. And we haven't given the money that we promised for adaptation and mitigation. And now creating another fund where we say we'll give money — if we haven't given to the first two, why do we believe that will be money for the third? So, right now, there are more emissions coming from developing countries than developed countries. But it's really important for those in the developed countries to realize that no matter what we do to get our emissions down to zero, it won't solve the problem of climate change, which is a global problem, unless we get the developing countries, emerging markets on board. And I think admitting that we had some culpability for where we are was an important step in getting them on board. But the real issue going forward is the money.

But it's not the only issue. Meeting our goal of addressing climate change is going to require knowledge. And one of the problems has been the intellectual property regime, which restricts access to knowledge that would enable those in developing countries and emerging markets to go further in reducing their emissions. In the Rio agreement, there was a recognition of the importance of this notion of compulsory licenses, which we have in a context of health. But the health of the planet is every bit as important as the health of individuals. But the United States and Europe have consistently tried to forget about those obligations in the sharing of knowledge. And, you know, quite frankly, I'm not very optimistic, given how badly we behaved with respect to the intellectual property related to the pandemic, to COVID-19, where it was so obvious and in all of our interests that that knowledge ought to be shared, and yet, we still do not have a waiver on intellectual property related to therapeutics, tests, treatments.

**Kattan**: Thank you so much. And, I mean, this was, of course, COP 27 — Professor Tubiana, you were instrumental in creating the Paris Agreement at COP 21. And so I'm wondering, in terms of achievements, this global framework that was created to avoid catastrophic climate change by limiting global warming to two, below two degrees: nearly nine years on, what is your assessment of the success of the Paris Agreement? And has it been a turning point in the world's recognition of the urgency of climate change?

**Laurence Tubiana**: I think that Paris Agreement was a turning point, which I believe not because of she's my baby — but of course, sometimes we are a little bit too proud of it — but the governance of the global system, it's very, very fragmented. You will have, whatever happened in the World Bank or IMF or elsewhere, you have many governance systems with different objectives. The Paris Agreement, beyond the commitment of the parties to deliver — which they are deliver very slowly, but they are delivering partly; we will come, I will come back to that — has played a role to unify the reference of the objective of a system which is by nature, very fragmented. And when I see the youth demonstrating in the street, as well as CEOs companies, of banks, or, of course, governments and international institution referring to Paris Agreement, I think that's a very big value. Now, of course, the problem is implementation of this commitment. I do think that on one side, things are working. Now 90% of government has committed for net-zero emission by 2050, which was unimaginable before Paris. And it is in the Article Two, of course. It was a major shift of understanding and representation of what climate change means. So totally different what we agreed in 1997 in Kyoto. It was incremental in 1997. It was every country in 20- in COP 21. Now, we are just, it's too slow. If we had had the Paris Agreement 10 years before, maybe in Copenhagen, or even before, I think we will be probably relatively okay. But we have been so long in designing with so much conflict between north and south, so much willingness, of course, on the oil and gas sector to block any negotiation. So we have been delayed in the compromise we got. And now we have to accelerate, which is, of course, very worrying. We should be decreasing emission by 7% a year. EU at the March it was relatively good results. Last year was 2.5 of emission reduction. U.S. has gone up. China has plateaued last year. So we may need to revise the governance of this agreement to have accountability in every place. That's why I'm very interested, in your point of view, how we can make companies really accountable. Not voluntary commitment, but seriously. How we can have the World Bank really responding to the challenge.

**Kattan**: Thank you. And this is a great segue into my question to you, Professor Chiroleu-Assouline. In terms of actions to combat climate change, carbon pricing is a very potent tool. Is there a correlation between carbon pricing and economic growth? And how important is carbon pricing generally to making a real dent in reducing greenhouse gases?

**Mireille Chiroleu-Assouline**: Carbon pricing is an essential tool. The issue is that carbon emitters don't take into account the effects of their emissions. What do they take into account? Only their private cost. And so, if it is not costly to emit carbon, there is no reason to reduce the emissions. And this is the basic principle of carbon pricing. But these prices, because they are market prices, are very volatile. For example, one year ago, just after the Russian invasion of Ukraine, the European price on the carbon market fell below 60 euros per tonne. It was at 100 and it fell. It fell again in September. It is now again at 100 euros. This is an issue because if you want that carbon emitters anticipate and make their strategies accordingly to this carbon price, if these prices are not stable, this is a real issue. Another point I would like to make is that these prices apply only to a fraction of the emissions concerned. For the European Union, the carbon market applies only on the industry and power generation, nearly 40% of European emissions. To your other question, is there a correlation between carbon pricing and the economic growth? For sure it is easier to implement a carbon price in a wealthy economy. This is perhaps the only correlation I see. People or firms were very afraid of carbon pricing, saying that it would decrease their competitiveness and it would be bad for the economy. But I will take the Swedish example. In Sweden, since the implementation of this carbon tax, the GDP growth was 83% and the CO2 emissions decreased by, I think, more than 35%. And so, you see, carbon pricing may be very efficient in reducing emissions without impeding economic growth. Everything depends on the way you implement this policy.

**Kattan**: I mean, another tool that you have in the toolbox to impact climate change is ESG. And I'd like to turn to you, Patricia Crifo. So, ESG refers to environment, society, or social, and governance. It's an increasingly popular way of measuring a company's impact on the environment, on social equity, and corporate governance. There's a new practice in some companies to implement ESG contracts, which are included in CEOs' packages. Performance on ESG objectives are reflected as well in company's annual reports. What is the real impact of these measures? I mean, when you have, you know, ESG, in the contract of a CEO, does that really incentivize the company to take real steps to reduce carbon emissions? Or is this simply window dressing?

**Patricia Crifo**: I mean, money is really a way to incentivize. The question is, is it window dressing or not? First of all, let me just highlight that around the world, one third of the companies worldwide — listed on the stock market, but also smaller-size companies — implement such kind of ESG policies. So it's a real rising phenomenon. So we can, I mean, we can be skeptical, okay. We can say, "Okay, is it greenwashing or not?" Let me take a few examples. What form does it takes? Apple in the Silicon Valley has decided that 10% of its top executive bonuses will be based on ESG factors that should be well measured. But in Europe also, the Deutsche Bank, for instance — it's very interesting that banks also do that — has decided to implement such kind of policy. There are some differences between short-run and long-run bonuses. And fortunately, most of the indicators, most of them are based on social performance. But for long-term performance, most of the companies implement such kind of bonus based on environmental performance. So there is some hope in this: Once the company is really sincere, when it's put in place a consistent framework, it works. It seems to work.

**Kattan**: For some people, these incentives are not necessary. And increasingly, particularly in Europe, there is talk of, of "degrowth." So this is a new notion. And I'd like to have your take on this, Professor Stiglitz. You know, the idea is that, in the face of the existential threat that climate change poses for humanity, focusing our efforts on sustainable growth and energy transition will just not be enough. The entire model of capitalism, and the premise on which it's based, the premise of growth, needs to be rethought. Do you agree? And can, indeed, achieving zero, net-zero emissions, be compatible with sustainable economic growth?

**Stiglitz**: I want to make a couple of comments on a few of the other remarks that have been made. One of the peculiar things of what's going on in the United States is that several states are passing laws that you cannot use ESG. It is perverse. But the interesting thing here is the way globalization is interacting. Because you referred to, you know, a lot of the global companies. The global companies are going to have global standards. And the fact that they're operating in Europe and have to attain these standards is going to affect their operations in the United States. So this is, you know, I've been very critical of many aspects of globalization. This is one of the positive aspects of globalization. And that is, Europe's leadership has foisted a set of higher standards that have now become the global standards. Now, to answer your question about degrowth. I don't think that's the solution for a couple of reasons. First of all, there are a lot of people in the world — we may feel this here, or in New York — who do not have adequate food, healthcare. We cannot tell the developing countries, "You can't grow." Secondly, I think part of the answer to climate change is innovation. It's decarbonizing the economy that we have. Again, I don't want to sound self-interested here, but that's about the knowledge business. And I actually think — Nick Stern and I have written a paper on this recently — the pursuit of the green agenda can be the basis of real economic growth. I mean, just think about one of the bases of growth is increases in productivity. The reduction in the cost of energy from the reducing the cost of producing renewables is an enormous savings of resources. And that means that we can have more output with less input. So I think that the degrowth agenda hasn't really focused on what our objectives should be. We have to have a world in which we have zero carbon. We also have to have a world where we're going to have greater equity and address the problems of poverty in the third world.

**Kattan**: Right. Professor Tubiana, Professor Stiglitz just raised the very important issue of social justice and equality. The 2018 Yellow Vest movement in France showed that energy transition measures could not be successfully implemented without popular support, and particularly, that social justice really had to be at the heart of the equation. How do you balance social justice and policies aimed at carbon emissions? Can, how do you make sure that they are not incompatible, but that they basically respond one to the to the other?

**Tubiana**: The problem is we have based all the economic growth — and that knowledge is absolutely crucial — on an extractive model. We, even now the green economy is struggling to not be an extractive economy. Now a new type of minerals and not oil and gas, but it's still an extraction of natural resources. And this has a limit. This has a limit. In particular, if we want to have everybody having access to quality food, health, housing, we cannot just think that we can continue with the extractive model and replacing drilling by mining of copper or cobalt or lithium everywhere on the planet. So I think we have to rethink the way we are working. And we have, through technology, many, many possibilities. Just recycling, for example. On the social justice element, one element which I'm very proud of: We have had, together with Claude and at Iddri, a bright student who is now leading with Thomas Piketty here, a very, very good job about carbon footprint and the inequality of the carbon footprint — not between countries, but within countries. And when you look at the carbon footprint on the 1%, the wealthy, you see that the problem may be in the way we are living. Not the 80% of the 99%. It's a 1%. There was very anecdote these days about the carbon emission of one guy, and in one week, he made emissions at equivalent of the emission of somebody in many developing countries, or even in Europe. So first, justice has to be really that everybody support the cost in participation of their own carbon footprint. That at least people that are really have a huge carbon footprint pay the price. So that's one. Second, if we do well, if there is no government failure, in particular in the infrastructure investment, there is no necessity to see that environmental policies has to be regressive. Which they are, for the moment. Because when you tax and you don't have any solution to take public transport, of who you are, you are penalized. And it's more important for you if you earn 2,000 euros a month than if you earn 10,000, which you don't care, really, about the carbon tax on your vehicle. So I think you can do compensation. You can issue, of course, compensation money like the Canadian are doing. It is good to give check to people because they pay an additional price to, for transport, private transport, for example. And finally, look at the food issue, which is not only the Yellow Vests problem. It was, and it is now, in France, for example, access to healthy food is super expensive. Why? Because we have a whole organized system of the agrifood industry, who is more interested in margin of profit than to really offer a sustainable food with, of course, a different type of agriculture. Looking back at your work, Joe, when you did capitalism and greed, it's more the problem that capitalism and the functioning of the economy. So the greed element is something that will kill us all. Look at the profit — $5 trillion, I think, of the oil and gas industries this year, in 2022. Five time what they earn in 2021. So I don't think there's a lot of economic sense in this.

**Kattan**: Professor Chiroleu-Assouline, one question, really, about incentives — and sometimes incentives, it seems to me, can have unpredictable effects. So the U.S. inflation Reduction Act, which is essentially an environmental act, will invest $370 billion of government support into renewable energy technology, which is fantastic. But in Europe, many governments are actually worried that these incentives will lead many European companies to relocate in the United States to benefit from these subsidies. So will it generate a kind of green industry race creating counterproductive competition? And how do you avoid putting certain countries at an unfair advantage when you create those kinds of incentives?

**Chiroleu-Assouline**: In this passage of the Inflation Reduction Act, the good news is that after four disastrous years of absence of climate change policy in the United States, now things have really changed. This plan shows a real willingness to engage effectively in the energy transition. The less good news is that a large part of this aid is conditional on the local content of production. And this is protectionism. These incentives in danger of driving many European companies to the U.S. The amount of subsidies is very huge, but you have to compute it per year. And on a yearly basis, they are twice lower than in Europe. And so, if we observe relocation of industries from Europe to the United States, I think it will not be due to this Inflation Reduction Act, but more to the low price of energy in the United States. And another point I would like to make: The real competitors here are not really European industries. They are more Chinese industries. Low-cost Chinese industries. And this is a common competitor for European and American industries. My view is that such a race will have global benefits. If power generation, both in the United States and in Europe, is increasingly green, knowledge will increase. Positive externalities of knowledge will, will benefit also to developing countries. And I think that such an industry race is not a bad thing. Economists may think that if research and development expenditures are in excess, you may have duplicate efforts. I think that this is not a big deal, and we should have more beneficial impacts than detrimental ones.

**Kattan**: It remains for me really to thank you. Thank you for a rich and inspiring discussion.

(Theme music in)

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