

# **GC IAC Chair, Mr. Erik Solheim**

## **Renewable Energy and the Indian Ocean**

### **26 January 2026**

Very good morning or good afternoon, everyone. I'm so happy to see so many old friends and also new friends - a lot of people I have known for many years now. I am happy to see you all and to speak about the enormous global shift which is happening into renewable energies.

2009 was an absolute consequential year in the modern history of Sri Lanka. That was when the war ended. It was also a great year for the global environment. It was the time of the Copenhagen climate conference; that was the hyped conference. Everyone expected this would be the place where the climate issue would be resolved once and for all. The new Jesus Christ, then President of the United States of America, Barack Obama, was coming. Premier Wen Jiabao was coming from China, Manmohan Singh from India, Merkel from Germany.

“They were all there and the expectations were there: we will go back happy and the problem resolved; we can just tick it off in the resolved box”. Then of course, basically nothing happens. Happened, everyone went back in despair, people were crying, people were angry, and people said, 'Why would we do all these efforts when there no results?' But what not one person never mentioned in the Copenhagen conference was the fact that the price of solar energy will fall by 90% in the decade after. It's even better: the price of solar energy is now 5% of what it was in 2005. And that is what's driving the change now. It's not a diplomatic effort. It's simply the price. Led to two enormous global shifts which people don't still really realize:

1} One is a shift from a European-American-led world to an Asian-led world. Ten years ago, if anyone asked me where should I go to be inspired for environmental action, I would say please go to Brussels, go to Paris, go to Berlin. The same question is asked to me today. I will say, please go to Beijing. Then maybe please do a stopover in Shenzhen, the tech capital of China. Then we continue to Delhi to see what Prime Minister Modi is doing. And then we continue to Jakarta to see what Indonesians are doing to protect their rainforest. While the environmental efforts were led by Europe, they are led by Asia.

2) The other shift is as profound. Previously, the diplomacy was the main driver of the environment action. Now it's business. I'm not saying that we don't need diplomatic conferences. They serve some purposes. There have been some achievements. But by

and large, the climate conferences, whether in Dubai, or in Azerbaijan, or most recently in Belém in Brazil, there are very limited outputs from these; the action is with business. Why has this happened? This is because we are coming into a new global paradigm. revolution happened in the United Kingdom in the 1780s. The Brits were not stupid. They knew that sending a 10-year-old boy or girl down in coal mines was dangerous. They knew that the smoke in London or the harm to the forests of the United Kingdom was dangerous. They knew all this, but they, as every other people in the world, felt that prosperity is more important.

If we want to go prosperous, there's no other way than fossil fuels. That was the development model invented, yes, by the Brits, spread them to Germany, to France, to the United States of America, to Japan, to Korea, to China, to everywhere. We base our development on fossil fuels because there is no other way. Well, that was the past. 2025 was the first year in human history where we developed more energy from renewables than from coal. 2055 was the first year in human history except during COVID. That cold— went down in China. Coral— went down in India. Yes, during COVID it also went down because of the economic crisis, but now it went down both in China and India, the two largest nations in the world. Because it was replaced by renewables.

Solar and wind took over the market. And of course, here, there are huge win-win-wins. If you switch from Coal to solar now. Because everyone understands this is great for the environment. Everyone understands this is great for climate? But it's also now a commercial wind. You save money. It's cheaper to go solar than to do coal. And of course, it's an enormous benefit for energy security. Sun is Chinese, wind is Indian, the hydropower is Indonesian. You develop your energy on domestic resources. Rather than being developed depending on imports from Russia, Saudi Arabia, my nation Norway, whatever. So there are enormous wins in this shift and that's why it's happening. I'm travelling quite a lot to the same conferences as Prime Minister Narendra Modi of India, which is of course the most important politician in the Indian Ocean Region.

Region. I am very impressed with the message which Mr Modi is following. He is never speaking about global climate talks; I cannot recall him ever touching upon global climate talks. He's not even speaking about emissions, because I think he believes that emissions is somewhat theoretical and not so close to the heart of the farmer in UP or Bihar. Prime Minister Modi's message is absolutely consistent, it is: India can go rich and go green by the same policies; India can bring prosperity and protect the nature; India can combine ecology and economy. The choice between the ecology and economy was a thing of the past. The future is the combination of ecology and economy; and, by the way, he will add: India can shine on the international scene if we become a leader for the green development in the world. This is the message of Prime Minister Modi.

This is of course exactly the same as the message of President Xi Jinping of China. He has even framed it in the In English: "green is gold", meaning that going green creates prosperity and economic development. This is different from the message of the other most

important leader in the world, the President of the United States of America. He wishes to go back to the past. He wishes to make America a petrostate or a coal state, but of course he will never be able to succeed in this, even if he tries. He will be able to slow down the green development in the United States a little, may have some small negative impacts on the world, but overall he will be as successful as those guys who cling to the horse carriage when the car and the train was invented.

You cannot uninvent the solar panel. We cannot uninvent the electric car. I've never met a person who switched from a gasoline car to an electric car who wanted to go back to the gasoline car. You can hate the environment but still love your electric car. So there's no way Trump can remake this. He can only slow it down a little bit in the United States, which, of course, will mean the United States will lose technology and competitive power, and China and Korea and Japan and Europe and others will capture those markets which General Motors and Ford and American companies will then be forced to leave. They don't want to leave these markets. They all understand that the future is electric cars, but they are pushed by the President to try to leave some of these markets, and it will be a failure.

General Motors was the most successful car company in the world for 100 years. Fantastic company. It was founded by a person called Mr. Durant. Mr. Durant was running a business in Detroit in the United States, making carriages for horses. For very long, he said there will be no future in cars; money will be in the horse carriages, and that's what I can do, that's what I will do, and that's the future of humanity. Until he came to the point, ofcourse where he understood this is completely nonsense, the future is cars. Then he founded General Motors and he made General Motors. For 100 years until Toyota surpassed it, and in the future, maybe BYD will surpass it. But it made General Motors the car company of the entire world. And he made Detroit with Ford, the car capital of the world.

What Trump is doing is to reverse this, to go back to the horse carriages, and it will never succeed, and it may harm the people of the United States of America a little. China is now the indispensable nation for the green transition. I know this is somewhat harmful for Europeans and Americans to hear, but it's a plain fact.

China is now the indispensable nation for the green transition. I know this is somewhat painful for Europeans and Americans to hear, but it's a plain fact. China is at least 60% of everything—solar, wind, hydropower, electric cars, electric batteries, high-speed rail, metros, whatever you want to mention, China is at a minimum 60%. On some of these, China is 90% of the global market. That's a fantastic achievement. The world should praise China for this, but the world should also rise up to compete better with China, because we will not be well served if China dominates all these markets. Better to have other players competing with China in these markets.

Just one figure: China last year added 300 gigawatts of solar energy to the grid. How much is that? Well, it's, for example, about 50 times the entire grid in Nigeria, which is the largest nation in Africa. It is 100 times all hydropower from Nepal, which is a major hydropower

nation. It's ten times all hydropower we have ever made in my nation, Norway. It's much more than any nation has ever made in the history of solar power; about double of what the United States has ever made and three times what Japan or India or Germany or other major solar nations have ever made in their history. So, however you may measure it, it is absolutely enormous. And how did it happen? In my view, it didn't really start with the climate. It started with pollution. People of China were so tired of the pollution. Whenever you spoke to a person in any Chinese city, he will tell you, "Yes, I appreciate economic development, it's great to go to the supermarket and see all these goods. I'm very happy that I'm living in a big flat and my parents were living in a very small; all that is good. But I want to see the sun, and I don't want my children to live in this hell of pollution". That was the message I got all the time from at least city dwellers in China. The message went up to President Xi and the top leadership, and they decided to act, and now, of course, it's complete change.

Ten years ago, I would never go running in Beijing. Why would I inhale all that smoke? Now I'm happily doing it. The air is clear. It's fresh, even in winter, when it used to be most polluted. The sun is shining, the sky is blue. It's just perfect for a run every day in Beijing. The figures for Pollution in Beijing last year was 27, while in the past it was in the many hundreds. This is a very low level by global standards. So this is a fantastic achievement, but it started with pollution. Then the Chinese realized that when we act on pollution, we also benefit from climate. But we will also be energy independent, as I said, because we will develop our domestic resources and we can capture markets and green industries are now one of the core growth drivers in China. It may have been something like 20-30% of the economic growth is related to the green growth in China.

China has now developed a five-year plan for the next five years and two big sectors is the green development and it's artificial intelligence and digital development that's what they focus on. China has gone from very much in the backseat of the environment to being the lead. And no nation today can go green at speed without China. Of course, it's possible for each nation and the United States to develop it all on its own, just that it would be so much more expensive, and is very difficult to do. I go to a number of the massive green developments in India and nearly everywhere is based on Chinese equipment. But India is working very, very hard to develop it domestically, getting the jobs in India, but the core equipment is Chinese. That's because it's the cheapest and the most reliable, and every nation who wants to go green now depends on China to help that happen.

But just to give you a couple of examples of the massive development also in India, in the Indian state of Andhra Pradesh, GreenCo, which is a medium-sized Indian company, has developed what is the largest integrated solar and wind and hydropower facility in the world. Works like this: daytime, of course Andhra Pradesh is blessed with a lot of sun, you pump up the water in the reservoir, and then release it at night and then you have 365 days of energy, 24 hours. Even if there is no sun, you just release water from the reservoir. There is no river, there is no natural hydropower, it's just the water being pumped up and down as a battery for the solar energy. How big is it? 6.5 gigawatt. Well, that's double all

hydropower in Nepal, just to make a comparison. And I think 6.5 gigawatt is not so far from the entire grid in Sri Lanka, so it's massive. And GreenCo will make five or six of these before 2030 in different States of India, and Adani is doing exactly the same. So we will have about 10 of these facilities by 2030 in India, solar-powered. but hydropower as the battery. So every nation who decides to stand outside this, I'm very sorry to say, will just be the loser of history. China and India, but many other nations are moving so fast.

Pakistan has also developed enormous solar power to such an extent that it has been a problem for the grid because the price of the grid has fallen and the companies who deliver to the grid have difficulties because of lowering prices as a consequence of the massive solar energy developed in Pakistan. So it's happening in many nations but China and India are in the lead.

So what are then the opportunities for Sri Lanka, Bangladesh, Nepal, other nations? Let me focus on a few. Few areas. First of course, renewable energies and in particular solar. Solar will be the dominant energy in the 21st century, be it no doubt. But it will be solar with wind, with hydropower as battery, there may be more nuclear, there may be a different variety of different energies, but solar will be the dominant.

There are a few issues with solar, which a nation like Sri Lanka need to solve. Of course, the large solar farms need a lot of land. That's why in India they are in Gujarat, in Rajasthan, States with a lot of land, and in China, they're in the western part, where they're not so big population, but lots of land. Some of them are as big as the ocean. They're not small and sweet. You see nothing but solar panels to the horizon. As I am aware, there is no place in Sri Lanka you can make solar farms of that size. There's simply too many people around and too little land to do that.

But there are many opportunities to make smaller solar farms in all available non-used land in the countryside, to solar panels on the roofs; to do agri-solar, meaning that to combine agriculture with solar. We put the solar panels in the farmland and you do products which can thrive under the shadow of the panels. Sometimes it's better because you don't get the direct sunlight, but you get the same temperature. This is done now more and more in China, and Sri Lanka and other nations should look into how this can be done. So land is a major issue. Speaking to the local people is critical because otherwise you will get up to protest. Sri Lanka had a lot of protests in Mannar against wind farms. I went there and spoke to a good number of the people and a lot of the claims which were made by those opposing the wind farms were, of course, completely ridiculous, like that this will harm the fisheries. I'm not aware that wind farms at sea have harmed fisheries anywhere in the world.

That was the concept of the people, maybe because there had not been too much conversation with them, maybe taking some fishermen to see some offshore windmills in some other parts of the world, to make certain that people can be confident there will be no effect on the fisheries, would be helpful? I do not know exactly what to do, but for sure, unless there is a local benefit solar and wind will always be difficult, and benefits should

also be financial. If you set up wind farms and solar farms in a community, the local community should benefit. Those nations who haven't done that have paid for it. In my nation, Norway, we believed that we could just build wind farms, just get it done, just make a commercial. And then people started saying to me, "Erik, look, how do I benefit from these wind farms? They may be good for the planet. They may be good for Norway, but they're not good for me. And my community. So I resist, even if you make them happen." So having a discussion with the local community as to the benefit and making sure that there are financial flows for the local communities, I believe, is critical if you want to develop the solar industry. And the last struggle or the last issue for the solar to improve is the upfront cost. Nearly everywhere in a two, three years horizon and going solar is saving money. It's not a cost, it's a cost saving. But still, if you don't have anything but very modest means, carrying the upfront cost may still be an issue.

In the Indian State of Uttar Pradesh, I met a lot of people who are running small green mills. In the past, they paid ₹40,000 Indian rupees a month for diesel. Now they pay ₹15,000 Indian rupees a month for solar. You would think everyone would say, "yes, thank you". You don't need to be an environmentalist to want to save ₹25,000 rupees a month for a small business. But still, the upfront cost of the installation may be prohibitive for the local mill owner and the banks are not really wanting to take on these small guys on their balance sheet. Need someone to do that. Now there is a company called Metafin which is specializing in this, linking a bunch of small businesspeople with the banks so that the bank can put the money, because it is not just one individual but it's 100, and then then you solve the problem. The upfront cost is solved and it happens.

So solar energy is a huge opportunity for Sri Lanka and for all nations in the Indian Ocean that China and India is leading. Look into all the practical opportunities, speaking to people, finding the land, doing it on the rooftops, and look into what they can do in the agriculture, then it will take off here also. Of course, an owner of a solar panel would want to sell the energy to the grid. You can have offshore, but if you can sell to the grid, which means the electricity company of Sri Lanka, you will have a much better business proposition.

So that's one solar and wind, and you need batteries. Battery can be artificial, battery, or it can be hydropower battery. China is now totally dominant in the battery business. There's only one competitor, and that's Korea. No one else can compete in that business. There is not one battery factory in the United States of America, not one battery factory in Europe, they are all Chinese or Korean. We should thank the Chinese and the Koreans for providing these batteries, but the rest of the world also need to step up to be able to compete and to create jobs in India, in Europe, in America, in Sri Lanka, everywhere. But, at the moment, the batteries are from these two nations. But the batteries are becoming much, much cheaper, much more efficient by the day.

And in Gujarat, India, for example, Adani told me that solar energy with battery is now cheaper than coal. So you get energy from the solar, you store it over the night by battery, and still is cheaper than getting the energy from the coal. This is of course what will define

the future: the price point, not the ideology. Because everyone, even those who are ideologically committed to coal, if they save a lot of money by going solar, they will do it. And that's what's happening. So that's energy.

The other area is transport. Electric vehicles are now taking over much faster than people believe. In China, 60% of all new cars are electric. I was just running close to a highway in Beijing, and then I realized, "Wow. There's no noise. It's a huge highway, but no noise." Why? Every bus is electric. Every scooter is electric. Every taxi is electric. 60% of all new cars are electric. And even quite a lot of the trucks are electric. So with electric mobility, there is no pollution and there is no noise and that's why it's happening everywhere. In Vietnam, 40% of the new cars are electric. Singapore, 50% are electric. In Nepal, which is, I think, the second poorest nation in Asia, next to Afghanistan, is much poorer than Sri Lanka. 80% of all new cars are electric. If you go to Kathmandu and it goes down the main road of Kathmandu, you will find all the electric car companies in the world. Yes, of course, all the Chinese like BYD, but you will also find Hyundai from Korea, you find Tata from India, you find the Japanese. They are all there to sell their electric cars to the population of Nepal, which then used the hydropower to fuel the car. So, if that can happen in Nepal, it can happen everywhere.

My nation, Norway, is proud to say that we have been the number one nation in the world in the penetration of electric cars. I mean, there are many, many more electric cars in China, but as a percentage, we have the highest number. 95% of all new cars sold in Norway last year were electric. And what we did can be done by anyone. There's no rocket science here. And basically, we did three things. First, we made sure that the tax burden of imported cars taxed in Norway but we changed the tax burden so that there is more tax on gasoline cars and less tax on electric cars, so that from the early days they become cheaper. Then we said, if you want to introduce a new product, electric cars, well, you need to give an introductory offer. Every supermarket in Sri Lanka will do that if they have some new products, they will give an introductory offer, maybe a reduced price or some benefits for trying the new. No one wants to be the first to try a new product, and particularly, no one wants to be the first to make a big expense like the car.

Buying the car is normally the second biggest expense for every family, next to the flat or the apartment, then it's the car; "I don't want to experiment, I want to see that electric car works with the other people, my neighbors, then I buy it". So you need to give an introductory offer. And we made that— we said you will have access to bus lanes. You can go into the city center in bus lane, saving time, you have lower price on parking, you have lower price on ferries, which we have a lot of in Norway, and there are benefits if you go electric. And then we started charging stations in the beginning from the government, but now it is completely run by the market. Every shopping center, every hotel, every petrol station is running their own charging station, and people can also charge back at home. So with this, very simple policy tools— changing the tax burden, making charging available. and giving introductory offer, and people started buying electric cars, and it increased by 10% every year. Now it's close to 100%. And the most important thing is no one wants to

go back. We have had a lot of political opponents who opposed this policy, said we shouldn't do it, and there were a lot of people who said, "Oh, the gasoline car is much better" But no, everyone who has made the switch wants to stay with the electric car. Because the electric car is much better technology. It's much more autonomous. You can do a lot more autonomous driving.

You get much less noise. Much less pollution, you can now go 800km per charge, I mean you can go from Colombo to Jaffna easily without charging. Probably, you can go from Colombo to Jaffna and return without charging with the newest electric cars. In Norway, we want to keep our car warm in winter. With the electric car I just called the car and used the app, and when I got out of the car, it was warm. With the old cars, I had to spend like that for the first 10minutes in winter and of course, the same with air conditioner can turn on the cool in the car before sitting into the car if it's a warm day.

While the first people who did buy electric cars were probably environmentalists who wanted to do something good for the world, the people who do buy electric cars now are exactly everyone. Absolutely everyone. Even those people who oppose this shift now want the electric car because they want a better car. So, this is the second area where there is huge opportunity for moving fast. Sri Lanka has an opportunity to make the scooters, three wheelers, four wheelers, the buses, everything electric, but it depends on the government leading the way and then the market will follow, as in all other nations, and as I said, Nepal is now at 80%.

And lastly, there are huge opportunities in the different green sectors. Probably the most important outcome of climate talks are rules for the carbon market. Carbon markets can now be used by states or by individual companies to get carbon credits for protection of nature. I give you one example. I have been quite a lot involved with a small Latin American nation called Guyana. Guyana is the most successful protector of forest anywhere in the world. The rainforest of Guyana is completely intact, 99% intact. When I was in the Norwegian government, we paid Guyana to support their protection of the rainforest. But now Guyana has turned this into the carbon market and the people who support the protection of the rainforest in Guyana are the international airlines. You are United Airlines in America, or Lufthansa in Europe, or Air China I do not know, you are a big airline and you want to offset your emissions and you offset your emissions through the carbon market to support the protection of the rain forest in Guyana.

And then Guyana gets money, which they use to set up centers in the rainforest where people can go on the internet, cricket fields or soccer fields in the rainforest, they make small businesses in the rainforest, they make it possible for people to live in the rainforest but without destroying the rainforest. And in this carbon market, there is huge opportunities for Sri Lanka, but indeed for any nation in the Indian Ocean, for protection of mangroves. For transformation of agriculture into greener products, for conservation of forests, for so many things you cannot take. Everything from the carbon market, but you can get that substantial add-on to this. We have opened with a Company called ProClime, which I have

assisted in Trincomalee, protection of about 100 sites of mangroves along the northeast coast of Sri Lanka. Again, the carbon market is providing substantial money to the people who do the planting and protection of these mangroves. But there are numerous examples as to how this can be done.

So when you read media, particularly in Europe these days, you think everything in the world is bad. Yes, there are problems in the world for sure, but on many areas the world is moving very fast in a positive direction. and on the environment and climate, I'm fundamentally optimist. I'm not fundamentally optimist because I believe that the top leaders will come together and make an agreement to solve all problems, but I'm fundamentally an optimist because I think that the forces of market, or to put it more brutally, the forces of capitalism, has now come to such a point where the direction of the future is absolutely clear. We will go green, we will go solar, because it's the cheapest way to get our energy in the 21st century.

Thank you so much.