We have entered a decisive phase in the global energy transformation. Impressive progress in the deployment of renewable energy brought more than 171 gigawatts of renewable energy online last year, growing the share of renewables in global power generation to a third. This growth has created job opportunities. Today 11 million people are employed in the sector, a figure that would rise significantly if we can further accelerate the global energy transformation to be in line with global climate goals. There are many advantages to doing so.

Renewable energy is driving a shift in the way the world generates, distributes and consumes energy which powers economic growth and enhances energy security. It also brings widespread socioeconomic benefits, including millions of skilled jobs, better health prospects as a result of reduced air pollution, and breakthrough energy access for hundreds of millions currently still living off the grid. It can also significantly improve water security by providing lower cost, low-carbon desalination solutions, and it is a driving force for developing domestic industrial capacities. The increasing localisation of the renewable energy value chain brings further opportunities, particularly in research, development and manufacturing of the sector.

Asia is home to some of the world’s fastest-growing economies. Asian countries are set to build a new and increasingly inclusive economic future, based on low-carbon energy. Until now, renewable energy industries have remained relatively concentrated in a handful of major markets. Increasingly, however, East and Southeast Asian countries have emerged alongside China as key exporters of solar photovoltaic (PV) panels. Countries including Malaysia, Thailand and Vietnam were responsible for a greater share of growth in renewables jobs worldwide. Asia also accounts for more than 60 per cent of all renewable generation capacity added globally in 2018 and its installed capacity increased by 11.4 per cent last year. Forty-four per cent of all currently installed renewable generation capacity is in Asia, which is almost double the total installed capacity of Europe.

Much of this progress has been possible thanks to dramatic renewable energy cost reductions. In Asia – and as a consequence of Asian manufacturing also world-wide – renewable energy costs are competitive with traditional sources of power generation. In many parts of the world, renewables are already today the lowest-cost source of new power generation. And cost reductions, particularly for solar and wind power technologies, are set to continue into the next decade. Even the largest oil and gas producing economies are actively seeking to harness their renewable energy potential. The Gulf region, for instance, has emerged as a driver of the new energy age. Both Saudi Arabia and the United Arab Emirates (UAE) have set new price records for solar PV. Just recently, the world’s largest single solar project, the Noor Abu Dhabi solar plant, has started commercial operation, attracting a record competitive power tariff of AED 8.888 fils (ca. US$0.024) per kWh at the time of the bid. And Dubai’s Mohammed bin Rashid Solar Park established a new global cost benchmark for concentrated solar power of US$0.073 per kWh.

Government ambition has a big role to play in the surge of renewable energy in Asia. During the IRENA Council meetings held in Abu Dhabi earlier this year, India announced new plans to establish up to 500 gigawatts of renewable energy in the country by 2030. Saudi Arabia has recently announced plans to develop about 60 gigawatts of renewable energy capacity in the next decade, mainly based on solar and wind power. Solar tender in Saudi Arabia tend to attract global attention with record bids of around US$0.02 per kWh.

And then there is China. China has been crucial to the global energy transformation, leading the deployment and manufacturing of renewable energy technology both in Asia and globally. With over 75 gigawatts of new renewable capacity added, 2018 marked the seventh year of power capacity additions from renewables exceeding those from conventional energy sources. Global investments in renewable energy reached US$332 billion last year, with China alone accounting for US$100 billion.

All these developments open the door to a greater climate ambition. Renewables and energy efficiency are the only ready tools that we have to operate in line with the twelve years window, as indicated by the IPCC special report on 1.5°C, to change our path to a sustainable one. Much more is required to effectively limit climate change and support the achievement of the sustainable development goals. To meet the climate objectives of the Paris Agreement, renewables deployment must increase at least six-fold compared to current government plans. While this must be a global effort, much can be learned from Asia’s leadership. IRENA looks forward to continue working closely with policy and industry leaders of the region to take full advantage of the benefits of renewables in creating sustainable growth and livelihoods for all.