Summary of WWF’s “Hong Kong Energy Vision 2050”

Background

- WWF-Hong Kong believes that improvement is needed in terms of the environmental performance of Hong Kong’s energy policy. The current overriding emphasis on the reliability of the power supply has created a situation whereby Hong Kong has higher carbon emissions than other international cities.
- The HKSAR government has proposed a fuel mix “Plan A” and “Plan B” for electricity generation in 2020, aiming to replace the coal burning. However, the development of renewable energy sources has not been included in either plan. The results of the government’s consultation exercise will be published soon.
- A review of the electricity market regulatory regime will soon be conducted to decide the cost allocation of both Plan A and Plan B.

Projection if Plan A is adopted and the electricity market regulatory regime remains unchanged:

- Hong Kong’s coal-fired generating units will be retired and natural gas will replace coal as the major generation fuel. New natural gas power plants will need to be built and natural gas imported into Hong Kong.
- As difficulties carrying out demand-side management measures will continue for the government, electricity consumption will be allowed to grow naturally.
- The government forecasts that Hong Kong’s electricity consumption will increase to 61.5 billion kWh (an increase of 43 per cent) in the ‘business as usual’ scenario. Hong Kong’s carbon emissions from power generation will be 26,626 kilotonnes in 2050 – leaving the goal of cutting carbon emissions far from accomplished.
- The cost of electricity generation, including the cost of building new gas-fired generating units, will be around HK$87 billion, while the annual cost of importing natural gas and the social cost of carbon emissions will be approximately HK$67.1 billion in 2035.

WWF’s “Hong Kong Energy Vision 2050” reduces emissions by 90 per cent and saves over HK$10 billion

- The success of the vision is dependent on energy-saving policies and demand-side management being fully implemented, and annual targets of energy efficiency between one and two per cent being met. This vision therefore allows electricity consumption to be reduced by 50 per cent below the “business as usual” (BAU) scenario by 2050.
- Vision 2050 also advocates developing domestic renewable energy, including solar power and wind power; as well as importing renewable electricity from mainland China; all of which will reduce carbon emissions.
- If the above vision is realized, at least HK$11.7 billion will be saved every year after 2035.
- Replacing coal with natural gas to generate electricity will not be enough to mitigate climate change. Instead, Hong Kong needs to simultaneously develop renewable energy sources and in the meantime promote both energy saving and demand-side management. This vision will allow Hong Kong to reduce carbon emissions to 92 per cent below 1990 levels by 2050.

Policy Advocacy

- WWF-Hong Kong believes that the electric power industry – which accounts for over 60 per cent of Hong Kong’s carbon emissions – needs to change. Only through such change can the industry ensure a reliable electricity supply for the next 30 years while simultaneously combating climate change.
- WWF-Hong Kong believes that the Hong Kong government should set a target of improving energy efficiency by one to two per cent annually, while progressively increasing the use of renewable energy sources to reduce 90 per cent of carbon emissions by 2050.
- The government will complete its review of the Scheme of Control Agreement (SCA) with the two power companies, requiring them to share the responsibility for reducing pollution. Effective energy efficiency targets should be introduced in the SCA and an alternative regulatory regime should be adopted for renewable energy development.