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extension. the light  
made



**ASSIGN  
BUSTER**

It was in the 18th century that the path to the everyday use of electrical power began to take place.

In 1752, Benjamin Franklin did his famous experiment by tying a key to the end of a kite during a thunderstorm. He received an electric shock from the string the key was tied to as the key was hit by lightning. He was not seriously injured.

He proved that lightning was a form of electricity. In the following hundred years, many inventors tried to find a way to use electrical power. In 1879, the American inventor Thomas Edison was finally able to produce a long-lasting electric light bulb. By the end of the 1880s, small electrical stations based on Edison's designs were in a number of U. S. cities. But each station was able to power only a few city blocks.

In Ireland, the first use of electricity was lighting. In 1877 arc lamps were used to light up a construction site in Dublin. The Guinness Brewery used this electricity to build its extension. The light made it more convenient for the workers as they could work after the sunset.

In 1925, if Ireland wants to progress industrially, it must recognise the need to use and develop its natural resources. Irish engineer by the name of Dr. Thomas A. McLaughlin, suggests building a dam on the river Shannon. He wants to build an electric power station at Ardnacrusha in Co Clare to bring power to towns and cities all around Ireland. The Irish Government agree on the proposal of the power station and work began on the site in September 1925. The ESB In 1927 the Electricity Supply Board Act was passed to set up the ESB, the company responsible for controlling and developing Ireland's

electricity network. Around this time there were more than 300 different suppliers.

These suppliers were concerned with generating and supplying electricity in different parts of the country. The transfer of responsibilities from these few hundred suppliers to the ESB required both engineering and administrative skills. The huge development of these skills meant a great deal to the ESB as that is why they became such a success.

It wasn't until 1946 that the beginning of rural Electrification began to take place. This project involved the installation of electric infrastructure to power Ireland's people. This would supply energy, light and heat to help improve the quality of life. These networks and the power supplied to everyone enabled the social, economic and industrial development in Ireland. It helped it grow from an underdeveloped region to one of the most developed countries in the world. The ESB Networks still continue to work hard on the Irish electricity infrastructure to sustain a high standard. In the years 1950 throughout until the late 1960s the ESB installed a great amount of its generating capacity on just the use of turf. Turf was a valuable component for the ESB as at one time it constituted one third of the ESB's total capacity.

Peat development had a great impact on rural development during these years, especially in the midlands. By 1968 Ireland's population is growing dramatically but unfortunately there is not enough power to support this increase. The ESB had to recognise this and meet the demand for power. The ESB wanted to be as kind to the Environment as much as possible so they

designed and built a pumped storage hydroelectric station in Turlough Hill in Co.

Wicklow. This proved to be a good and new civil engineering solution for Ireland at that time. The ESB International (ESBI) established in 1975. ESB International focuses on the delivery of large scale Electricity for international companies and its main company, ESB. Since the ESBI has been set up, they have done projects in more than 120 countries. The high standards of their team help clients around the world to deliver high quality efficient energy systems which can help the economies and societies where they serve in. In the oil crisis in the early 1970s, it woke people up to realise that Ireland needs to reduce its dependence on oil as a source of electricity generation. In 1987 one of Ireland's largest stations, Moneypoint, Co.

Clare, was commissioned to help reduce its dependency. This station would use coal as its primary fuel source to generate electricity. Due to a major environmental upgrade being implemented in 2008, the plant was made sure to comply with the strictest environmental requirements for flue gas desulphurisation