In addition to the above factors, the technology diffusion process is usually the key factor affecting the development of wind power. The technology diffusion model is a generally-accepted approach for studying the effects of technological progress on promoting new technology applications, especially when analyzing the impacts of different types of technology on product growth in their early stages (Guidolin and Mortarino, 2010). The development of the technology diffusion model began in the 1960s. Fourt and

Woodlock (1960), Bass (1969) propose the use of an S-shaped curve to fit the diffusion of new technologies or products in markets. The universal S-curve is employed by the logistic, Gompertz

model, and Bass model (BM) of diffusion (Dalla Valle and Furlan, 2011). Then Bass et al. (1994) propose Generalized Bass Model (GBM), which is the generalization of BM. In previous studies, the logistic model, Gompertz model, BM and GBM have been popular approaches for analyzing the diffusion of wind power technology from a national or regional perspective (Dalla Valle and Furlan, 2011; Guseo and Guidolin, 2009; Usha Rao and Kishore, 2010). Dalla Valle and Furlan (2011) compare four diffusion models to study the spread of wind power technology, i.e., the GBM, BM, logistic model, and Gompertz model, and it shows that the GBM model predict more accurate results.