

Publication year: 2010

Source: Technological Forecasting and Social Change, In Press, Corrected Proof, Available online 10 May 2010

G.P.J., Verbong , F.W., Geels

This paper analyses sustainability transitions in the electricity system, using recent theories on socio-technical pathways. The paper describes three possible transition pathways and indicates the implications for (grid) infrastructures. The 'transformation pathway' is characterised by a further hybridization of the infrastructure; in the 'reconfiguration pathway', internationalisation and scale increase in renewable generation lead to the emergence of a 'Supergrid'. The 'de-alignment and re-alignment pathway' is dominated by distributed generation and a focus on more local infrastructures. We suggest that this pathway, which involves a major restructuring of the electricity system, is less likely than the other two. The de-alignment and...