

Outcome Assessment for the Effective Research & Development

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Abstract

Since our establishment in 1951, Central Research Institute of Electric Power Industry (CRIEPI) has been contributing to society through conducting various researches in the fields of science technology and socio-economics. Our research results have benefited a breadth of fields: they vary from those applicable to the electric power business, such as the new heat pump water heating technology called “Eco-cute” to those that are materialized not as products but as basic criteria or standards such as fitness-for-service-code for nuclear power components. The time taken from the accomplishment of the research to the practical use also varies from the prompt example like “eco-cute” to one that needs considerable time for commercialization largely influenced by energy policies and international energy trends, such as FBR technology, which is regarded as one of the most important technologies.

“Outcome assessment” is known as a superior method to assess such broad research results. For example, let us think that some industries have developed and sold their products utilizing the outcome of the energy conservation technology research implemented by CRIEPI. In Outcome assessment, the intellectual property such as research reports and patents produced in the process of research activities is called as “Output”, and royalties produced by the research is called as “Income”. We can say “Outcome” brought by the technology will have the various far-reaching effects to society, such as reducing energy use by consumers, lowering CO2 emissions, and increasing revenue of the industry that will be expected as the result of the propagation of the very technology. The “Outcome Assessment” is the means to evaluate the research results as quantitatively and comprehensively as possible.