## Research on the Drawing Method of Energy Sankey Diagram Based on Java

Chunyu DENG\*, Hongmin LI\*\*, Yupeng SHAO\*

\* Beijing Guo Dian Tong Corporation, China

dengchunyu@sgepri.sgcc.com.cn, lihongmin@sgepri.sgcc.com.cn, shaoyupeng@sgepri.sgcc.com.cn

Abstract—Energy consumption and efficiency is an important basis of a country's energy strategy formulation. Sankey Diagram has been more and more widely applied in energy consumption research as an intuitive tool to demonstrate historical energy consumption. However, the complexity of the drawing nice Sankey diagram becomes the bottleneck limits efficiency of energy researchers. As a result, an urgent demand has been derived for a graphics software that is able to automatically generate Energy Sankey Diagram based on Energy Balance Table. This paper studies drawing Energy Sankey Diagram based on Java Graphics2D, and introduces a multi arc seamless bonding curve drawing method. Experiments show that the method can not only flexibly generate flow curves, but also reduce the crosses between curves and thus makes diagrams clear and precise.

## Keyword—Energy Sankey Diagram, Graphics2D, Multi Arc Seamless Bonding



Chunyu Deng was born in Hebei China, 1982. He was graduated from North China Electric Power University, master, majoring in computer science and technology. Mr. Deng is devoted to the work of application of data mining in power industry.



Hongmin Li was born in Hebei China, 1988. She was graduated from North China Electric Power University, master, majoring in computer science and technology. Ms. Li is devoted to the work of data visualization in power industry.



Yupeng Shao was born in Heilongjiang China, 1980. He was graduated from Shenyang Lu Xun Academy of Fine Arts, majoring in Art and Design Research. Mr. Shao is devoted to the work of presentation Theory for big data visualization.