Preface

Out of the total amount of global air, which is 5,320 trillion ton, the total amount of CO_2 has increased by 77.4 billion ton by the energy conversion to fossil fuel after industrial evolution. CO_2 emission to the globe is 760 ton /second (24 billion ton /year) and 50%, which is 380 ton/second (12 billion ton/year), is being accumulated in the air. The CO_2 that is emitted every second is approximately 390000 m^3, which equals the volume of 39 gymnasiums.
This results in serious environmental problems such as global warming. Horrible problems are happening one after another such as Rapid melting of Ice sheets in Greenland and Alaska, huge collapse of 3,250 km^2 ice shelf at the South pole, ice melting at the North pole, the occurrence of 400 giant tornadoes in a week in the mid-west of the USA in May 2003, the occurrence of more than 50°C heat wave in June in South Asia, forest fire in Siberia, expansion of desert in northern China, etc. On the other hand, the world population increases by 2.4 persons/ second (77 million persons/year) and world economy is increasing by 3% every year.
The concern is getting stronger and stronger, that if economy grows with actual industrial technology in the population growth, it could bring global environmental destruction eventually by astronomical environmental impact with mass production and mass waste. That's why the movement has been global trend, which tries to realize environmental economy and solve environmental problems drastically by activating market competition of Sustainable Value Creation by environmental management which takes global limit into account.

JEPIX is a very useful method, which enables us to evaluate environmental performance of companies in a holistic way with a single unit. I expect this newest method developed by the research group supervised by Prof. Nobuyuki Miyazaki and chaired by Prof. Claude Siegenthaler will encourage more precise quantitative assessment of environmental management and improve environmental management in Japan. I therefore strongly recommend the use of JEPIX.

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