

Aspects

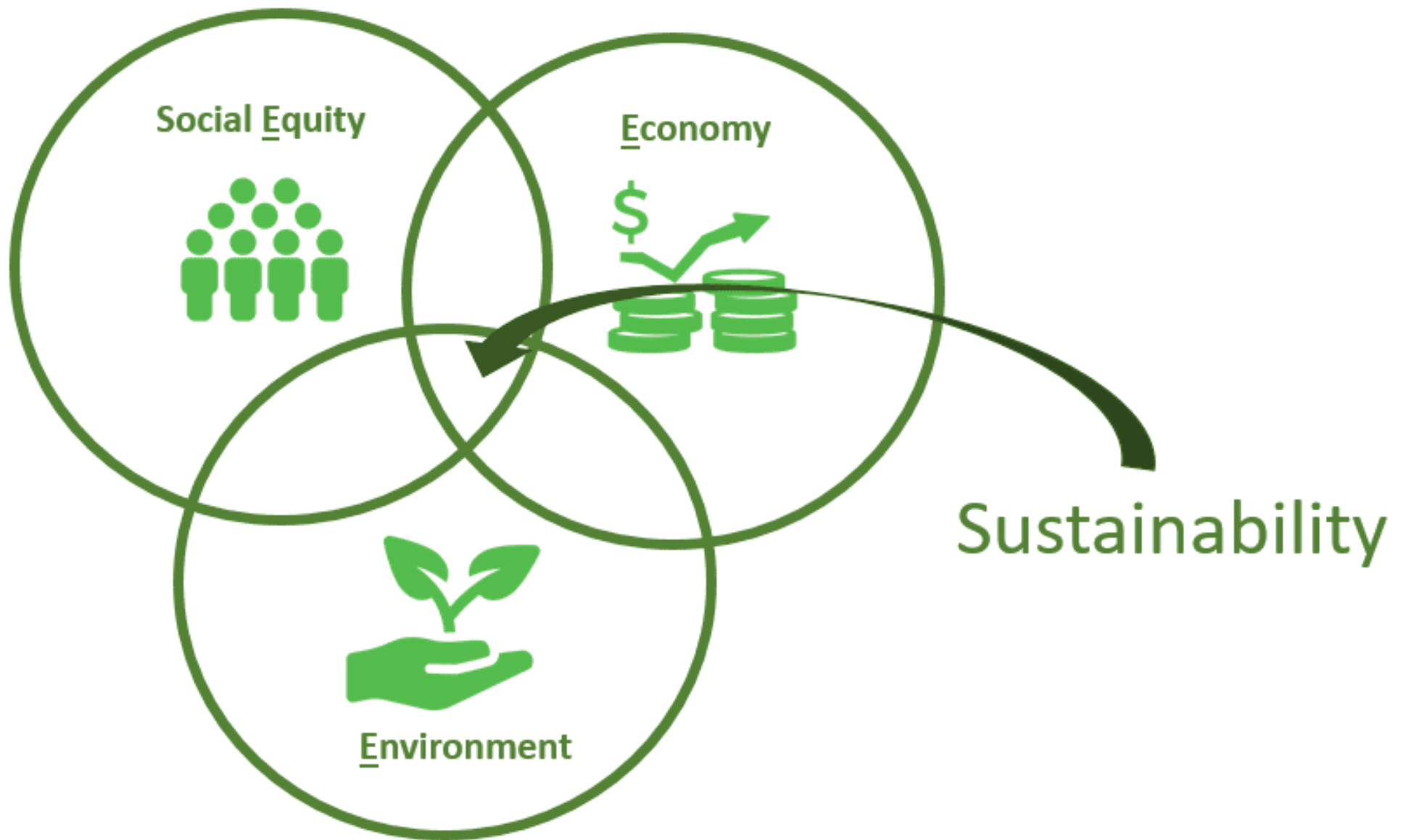


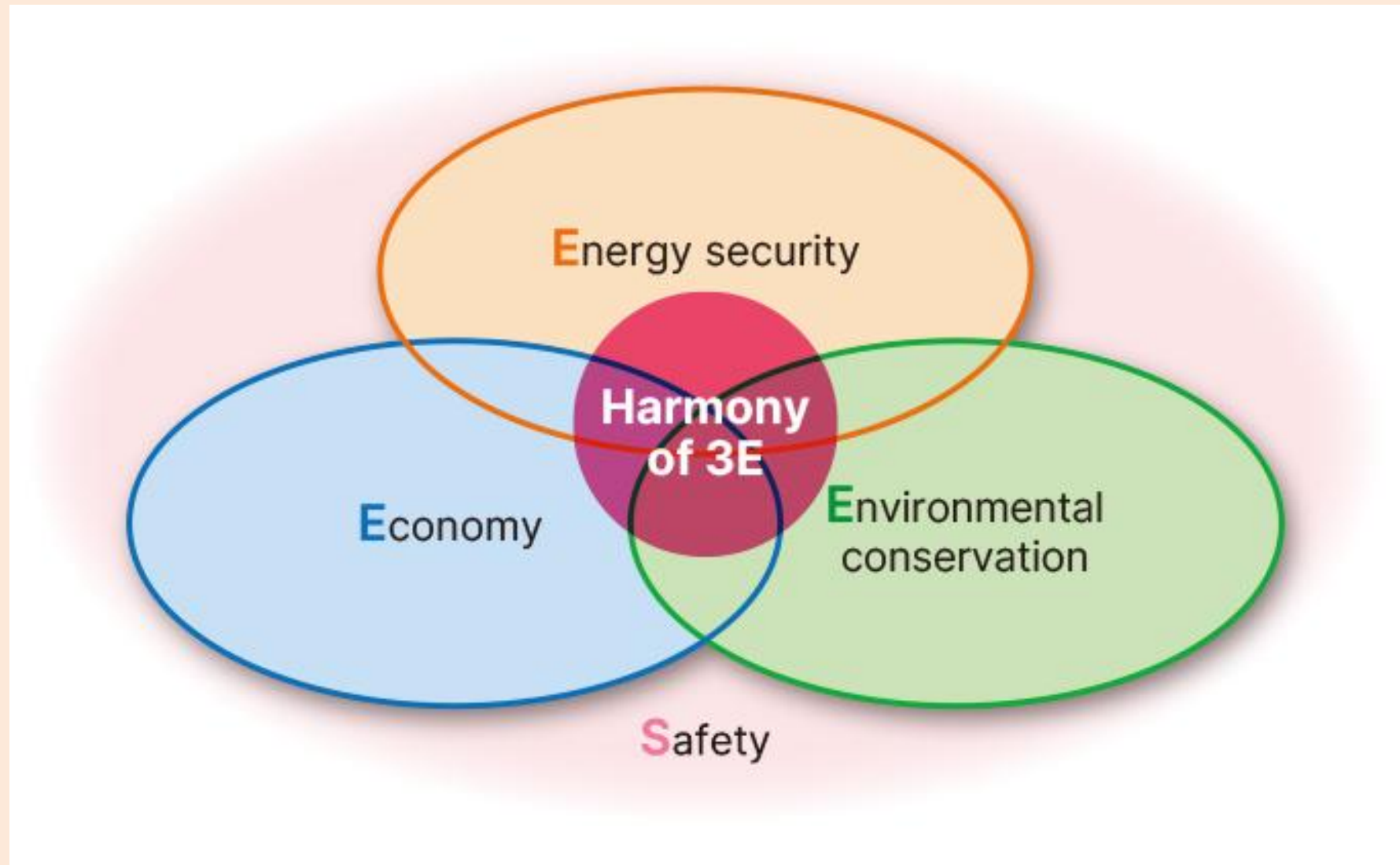
Environmental

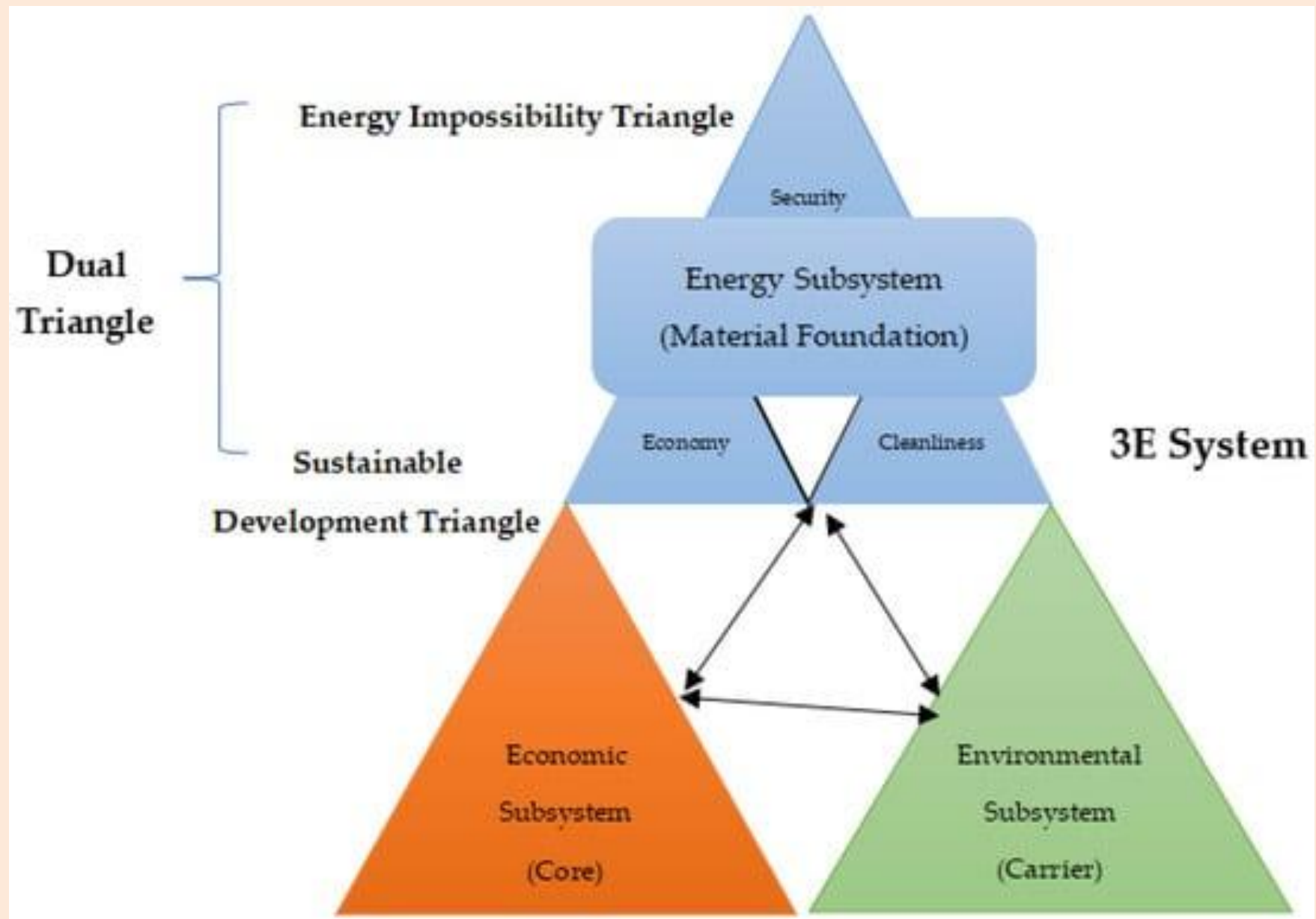
Economic

Social

Political







Environmental

renewable energy technologies generally do not emit harmful greenhouse gases or air pollutants during their operation. Instead, what pollution and emissions are associated with renewable energy are mostly tied to their manufacturing, construction and maintenance

Emissions during manufacturing, construction, and maintenance of renewable projects **depend largely on how efficiently energy is used as well as the degree of pollution control at the manufacturing site.** If not done properly, renewables can also contribute to disturbing communities, wildlands and wildlife.

Economic

Renewable resources have emerged as a crucial component of sustainable development, playing a pivotal role in reshaping the global economy. Unlike finite fossil fuel reserves, renewable resources such as solar, wind, hydro, and geothermal energy are naturally replenished, making them an invaluable asset for meeting the growing energy demands while minimizing environmental impact.

- **Job Creation and Economic Development**
- **Direct Employment Indirect Employment**
- **Regional Economic Development**
- **Energy Security and Stability**

*** Reduced Dependence on Imports**

*** Stable Energy Prices**

Economic

Economic Growth and Innovation

***Investment in R&D *Business Opportunities *Global Competitiveness**

Long-Term Economic Benefits

***Mitigation of Climate Risks * Environmental Benefits *Energy Independence**

Challenges and Considerations

***Initial Costs *Infrastructure and Grid Integration *Policy and Regulatory Support**

Social

Social impact may be defined as the effect on society and the well-being of the community and its members (i.e. families and individuals). Social impact also refers to “...the consequences of human populations of any public or private actions that alter the ways in which people ***live, work, play, relate to one another, organize to meet their needs*** and generally cope as member of society. The term also includes ***cultural impacts*** involving changes to the norms, values, and beliefs that guide and rationalize their cognition of themselves and their society”.

Society can be impacted by renewable energy decisions and may also affect future plans or decisions regarding renewable energy deployments or developments.

Political

Political impact may be defined as the enactment of government policies and regulations that impact the development, deployment, growth, supply, and general effects of renewable energy.

Market special interests or lobbies and the predisposition of the electric utilities also play an important role in defining political impact.

Also, geopolitical effects are considered in matter of Energy, materials and regulations