

LEGAL AND INSTITUTIONAL FRAMEWORK

WORKING DRAFT

Domain Introduction:

The attributes of the U.S. regulatory, legal, policy and institutional framework have a variety of implications for measurement of the contributions of mineral/material and energy systems to a sustainable future. (Institutions encompasses both the public and private sectors.) The framework is complex. Federal laws passed by the legislative branch of the government are implemented by the executive branch of government with review by the judicial branch. State and local governments pass and enforce laws and regulations affecting what people do with private property. Private customs and institutions can enhance or inhibit sustainable practices for energy and mineral/material systems. The economic framework can determine what is economically feasible for nonrenewable resource conservation.

Because of the difficulty associated with capturing this complexity, the indicators under this criterion will be treated somewhat differently than those under other criteria. First, the indicators for the legal and institutional framework will generally be reported in the form of a descriptive narrative or checklist of the state of the world because quantitative indicators fail to capture the full diversity of the legal/institutional environment. Because all regulations shift the distribution of resources and the burden of risk, the narrative description will be prepared so as to present an unbiased evaluation. Second, laws reflect differing objectives, descriptions. However, identifying the intended goals of each part of the legal or institutional regime is beyond the scope of this report. Alternatively, the balance and tradeoffs between various laws and institutions, e.g., between flexibility and standardization, will be acknowledged. Third, potential costs, as well as benefit measures, associated with legislation and institutional arrangements will be identified, although these will not be quantified. Fourth, the potential impacts of international agreements and trade policies on sustainable resource management are important issues that will be considered. However, quantifying these effects is difficult, fraught with uncertainty, and beyond the scope of this report.

Priority indicators are in italics.

Sub-heading 1: Extent to which the legal framework (Federal, state, local, Tribal) enhances or inhibits sustainable practices for energy and mineral/materials systems over the life cycle, including the extent to which it provides for:

1a. Clear property rights (including mineral rights, secure land tenure, and restrictions intended for the conservation of lands with special values), recognition of customary and traditional rights of indigenous people, and a means of resolving disputes.

1b. Periodic energy and mineral material resource assessment, land use planning, and policy review at multiple geo-political scales, including collaboration, coordination

and participation by relevant communities of interest (public, and federal, state and local governments, etc).

1c. Innovation supporting development and use of cutting edge practices and technology.

1d. *A compliance and enforcement framework that is understandable, implementable, transparent, and stable, including provisions for the resolution of conflicting provisions in legislation and regulations, and requiring clear standards, open decision processes, and consistency over time.*

1e. *The reuse, recycling, and/or remanufacture of energy and mineral materials.*

1f. U.S. participation in international Treaties and agreements that enhance or inhibit domestic sustainable practices for energy and mineral/materials systems.

1g. Development and maintenance of efficient physical infrastructure to facilitate the supply of energy and mineral/material products and services and support sustainable practices for energy and mineral/material systems.

1h. Estimation and reporting of the full compliance burden associated with the legal framework throughout the lifecycle of energy and mineral/materials, where compliance burden is defined very broadly and includes presence of uncertainty and duplication across regulatory authorities.

Subheading 2: Extent to which the institutional framework enhances or inhibits sustainable practices for energy and mineral/material systems over the life cycle, including the capacity to provide for:

2a. *Public involvement activities (e.g., education, awareness enhancement, extension programs, community capacity building and information availability) with respect to sustainable practices for energy and mineral material resources, e.g.;*

2b. *Development and maintenance of skilled workforce (competencies and skills) across relevant disciplines and institutions.*

Subheading 3: Extent to which the economic framework (economic policies and measures) enhances or inhibits (provides incentives and disincentives for) sustainable practices for energy and mineral/material systems over the life cycle, including the extent to which it provides for:

3a. *Investment and taxation policies that enhance or inhibit sustainable practices for energy and mineral/material systems.*

3b. *The identification and reporting of external costs (direct and opportunity, monetary or otherwise) of energy and mineral/materials related activities.*

Subheading 4: Capacity to measure and monitor the parameters associated with the sustainability indicators developed for energy and mineral/materials systems, including the extent to which it provides for:

4a. Compatibility with other countries in measuring, monitoring and reporting on indicators.

Subheading 5: Authority and ability to conduct and apply research and development, including the extent to which it provides for:

5a. Developing a scientific understanding of energy and mineral material systems' characteristics and functions, including externalities with respect to environmental, social, economic and geologic systems, and of these resources in national income accounts.