

**MAINTENANCE AND ENHANCEMENT OF LONG-TERM SOCIAL,  
ECONOMIC, AND CULTURAL BENEFITS TO MEET THE NEEDS OF  
SOCIETIES**

**TOTAL SET OF INDICATORS**

**Sustainable Mineral Roundtable Preliminary Indicator List  
June 2003**

*(Italics Indicates Priority Indicator)*

**SE 1. Local Economic Benefits [for mining dependent counties]**

**SE 1.1 *Employment and Income in the Mining Sector<sup>1</sup> in Mining-Dependent Counties***

Providing direct and related jobs and income.

SE1.1.1 Mining dependent counties as a percent of all counties

SE1.1.2 Direct employment

SE 1.1.3 Total employment (direct, indirect and induced)

SE 1.1.4 Direct income

SE 1.1.5 Total income

**SE 1. 2 Per capita income in mining-dependent counties**

Standard of living, measuring annual per capita income in nonrenewable resource dependent areas vs. country as a whole.

**SE 1.3 *Other income to communities from the mining sector***

-Royalties -Severance Taxes -Property Taxes -Other contributions

Benefits to the community; ability to support public services.

**SE 1.4 *Dependency of mining- dependent counties on minerals/energy activities***

The long-term viability of a community and its dependence on industry that is developing a finite resource.

**SE 1.5 *Degree to which a county is dependent on a resource affected by minerals/energy activities.***

A community may be dependent on a resource such as wildlife or land used for grazing which could be affected (positive or negative) by the resource development activity, some alternative may be necessary to offset that effect to insure sustainability of the community.

**SE 2. National Economic Benefits**

**SE 2.1 *Output/labor expenditure for the nonrenewable resource industries***

Addresses expenditure on labor per output, which would be a measure of labor efficiency, producing more materials with less input.

**SE 2.2 *Value of energy and mineral Resource Production***

Measures the overall benefits and fundamental contribution of E&M to well being.

**SE 2.3 *Net trade balance in energy and mineral commodities***

Import dependency, balance of trade (cyclical), net trade balance in various commodities over the long run affects maintenance of U.S. capacities.

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<sup>1</sup> The mining sector includes oil and gas extraction, mining (except oil and gas), and support activities for mining (e.g., exploration for metal mining, drilling oil and gas wells).

**SE 2.4 *Net Income in the energy and minerals sectors (Operator Profits & Land Owner Rents)***

Economic contribution to the economy of resource or energy production. Net profits fuel all economic and other related benefits.

**SE 2.5 *National employment and income in the mining sector***

Providing direct and related jobs and income as a means of maintaining economic well being.

**SE 2.6 *Total investment by the mining sector***

Capacity to provide mineral and energy commodities and investments in capital equipment, both currently and in the future.

**SE 2.6.1 *Tangible reproducible capital***

Capacity to provide energy and mineral commodities now and in the future.

**SE 2.6.2 *Exploration***

Proxy measure of ability to provide energy and mineral commodities in the future.

**SE 2.6.3 *Research and development***

Addresses the ability for industry to develop more cost effective, environmentally friendly, and/or efficient methods to discover and produce mineral and energy commodities, including research and development of pollution control equipment, and research into renewable energy, to become more efficient and more environmentally friendly.

**SE 2.6.4 *Ecosystem enhancement, reclamation, and restoration***

Addresses improvements in the quantity and quality of ecosystems within and near the project area, and addresses sustainability and enhancement of ecosystems while providing for development

**SE 2.6.5 *Education and training***

Insuring that there are technically educated employees for the industry to meet new and ongoing (retiring) needs, providing an ongoing supply of educated potential employees to meet present and future needs.

**SE 2.7 *Mitigation of hazardous mine features (e.g., adits, shafts, structures, open pits)-number of hazardous mine features mitigated at abandoned and inactive mine sites and the cumulative number mitigated as a percentage of the total hazardous mine features that were inventoried (physical count).***

Addresses the issue of the exposure of the local population to safety hazards present from past mineral and energy activities; quality of life.

**SE 2.8 *Energy and mineral intensity, use of energy and mineral resources per capita and per dollar GDP***

Improved resource efficiency promotes sustainability

**SE 2.9 *Energy intensity in extraction by sector***

Energy intensity in extraction or processing per unit of output.

**SE 3. *Cultural, Social and Spiritual Needs***

**SE 3.1 *Social characteristics of mining-dependent counties [local effects, these must be compared against a baseline, e.g., other rural communities, or the nation as a whole]***

**Domestic Violence Rates - Suicide Rates - Violent Crime Rates - Substance Abuse Rates**

Impacts of resource dependency on social organization variables, quality of life.

**SE 3.2 *Archeology - Number of archeology sites (pre-historic) eligible for the National Historic Register or other applicable regulatory requirements (e.g. ANCSA §14(h)(1)) that are within the proposed project boundaries.***

Addresses the quantity and quality of archeology sites to allow present and future development to go forward.

**SE 3.3 Historic Sites- Number of archeology sites (historic) eligible for the National Historic Register that is within the proposed project boundaries.**

Addresses the quantity and quality of historic sites preserving the associated cultural values.

**SE 3.4 Sacred Sites for Indigenous Peoples**

Land use conflicts between resource development and sacred sites to indigenous peoples preserving the associated cultural values.

**SE 3.5 Subsistence Activities of Indigenous Peoples: level of participation and level of harvest [local effects]**

Addresses the issue of how mineral production and transportation activities affect subsistence activities of indigenous peoples.

**SE 4. Equity**

**SE 4.1 – *Poverty levels in nonrenewable resource-dependent counties***

The percentage of households below the poverty line in resource development dependent counties. (In Alaska, borough or census district) versus the percentage of households below the poverty line for non-resource development dependent counties [Local effects]

Whether and how the low-income populations have been affected by mineral or energy development, maintaining or enhancing the quality of life of low- income populations.

**SE 4.2 - Percentage of population, by minority group, in mining-dependent counties.** (In Alaska, borough or census district) versus the percentage of population by minority group for non-resource development dependent counties. Whether and how minority populations have been affected by mineral or energy development maintaining or enhancing the quality of life of minority populations.

**SE 5. Recreation and Tourism**

**SE 5.1 Level of participation in Outdoor Recreation Activities in mining-dependent communities (local effects).**

Addresses the issue of how mineral production and transportation activities affect outdoor recreation activities.

**SOCIOECONOMIC BENEFITS CRITERION INDICATORS APPENDIX**

**SE 5.2 Old mine sites and towns and conversion of mine sites to recreation areas (local effects)**

Community dependence, resilience: Diversifies community economies and makes them more sustainable, cultural heritage.