







| | Direct | Indirect |
|---|--------------|----------|
| National Law (esp. re. land, labor, water rights) | \checkmark | |
| Community Consultation (esp. to determine land rights, social & environmental impact, idle land, resolve grievances) | ~ | |
| Social – biofuels should benefit rural communities and workers | \checkmark | |
| should not contribute to food insecurity | \checkmark | ~ |
| GHG (positive balance over lifecycle) | \checkmark | ~ |
| Environmental – conserve and protect soil, water, air | \checkmark | |
| conserve and protect high conservation values | \checkmark | ✓ |
| Technology –appropriate technologies should be applied, others used responsibly and transparently | \checkmark | |





| Overall Energy and Greenhouse Gas Efficiency Total score for product life-cycle (well-to-wheel) | Cons | servation of I | Natural Resour | ces water use | Social C | oncerns Working |
|---|---|--|--|---|---|--|
| Total score for product life-cycle (well-to-wheel) | biodiversity | soil health | air quality | water use | Food | Working |
| Low GHG emissions, | | | | | security | conditions |
| Low GHG emissions, | | | | | | |
| maximize carbon equestration (e.g. low-till) | Biodiversity corridors | Restore degraded Iand | No sig. impact on air quality on farm or at processing facility | No sig. impact on local water quality or quantity | Use of degraded /marginal land | Best- practice wages and working conditions |
| | | | | | | |
| 10-90% GHG emissions is compared to fossil fuel | Buffer zones | erosion protection | Moderate impact on air quality | Moderate impact on local water quality, quality | food security of project area protected | Seasonal job creation |
| | | | | | | |
| tigh N2O emissions from fertilizers, conversion of high carbon-stock land | Deforestation, habitat encroachmt. | soil erosion expected | Air quality impacts | Water pollution, significant reduction in water availability | Food security of project area jeopardised | Hazardous or illegal working conditions |
| High hig | 00% GHG emissions ompared to fossil fuel N2O emissions from lizers, conversion of h carbon-stock land | 90% GHG emissions ompared to fossil fuel Buffer zones N2O emissions from lizers, conversion of h carbon-stock land Deforestation, habitat encroachmt. | 90% GHG emissions ompared to fossil fuel Buffer zones erosion protection N2O emissions from lizers, conversion of h carbon-stock land Deforestation, habitat encroachmt. soil erosion expected | 90% GHG emissions pompared to fossil fuel Buffer zones erosion protection Moderate impact on air quality N2O emissions from lizers, conversion of h carbon-stock land Deforestation, habitat encroachmt. soil erosion expected Air quality | 90% GHG emissions pompared to fossil fuel Buffer zones erosion protection Moderate impact on air quality impact on local water quality, quality N2O emissions from lizers, conversion of h carbon-stock land Deforestation, habitat encroachmt. soil erosion expected Air impacts Quality | 90% GHG emissions pompared to fossil fuel Buffer zones erosion protection Moderate impact on air quality impact on air quality impact on air quality impact on local water quality of project area protected N2O emissions from lizers, conversion of h carbon-stock land Deforestation, habitat encroachmt. soil erosion expected Air impacts Water pollution, significant water availability Food security of project area jeopardised |



