CONTRIBUTION TO SUSTAINABILITY IN CEMENT AND COAL PRODUCTION
Southwest British Columbia, Canada
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Executive Summary
The report focuses on the environmental impacts of coal and cement production in British Columbia. The main conclusions include: 1) There are five cement plants in the province, and six coal mines in the region. 2) The cement industry in BC produces about 8 million metric tons of cement per year. 3) The main emissions from cement production are CO₂, NOₓ, and SO₂. 4) The coal industry in BC produces about 12 million metric tons of coal per year. 5) The main emissions from coal mining are CO₂, NOₓ, and SO₂.

Introduction
Cement is one of the key materials used in modern society. In BC, cement production for 2006 is estimated at 1.1 million metric tons. The cement industry is a major contributor to CO₂ emissions in BC, accounting for about 15% of the province's total emissions. The coal industry, on the other hand, is a major contributor to CO₂ emissions, accounting for about 20% of the province's total emissions.

Cement Background
Cement is a material used in construction, consisting of a mixture of lime and other materials. The most common cement used in BC is Portland cement, which is made from limestone and clay. The key components of cement are lime, silica, alumina, and iron oxide. The lime is derived from limestone, and the other components are derived from clay.

Coal
Coal is a carbon-rich sedimentary rock formed by the decay of organic material under a lack of oxygen. It is used in many sectors, including power generation, steel production, and cement making. Each variety of coal has different characteristics, such as ash, moisture, and sulfur content. In Canada, bituminous coal is the most abundant type of coal.

Data
Sample analyses and the results of the chemical analyses are presented in Table 3. The compositions of coal samples are compared with those of cement making samples. The data are presented in the following form:

<table>
<thead>
<tr>
<th>Sample</th>
<th>SO₂ (%)</th>
<th>NOₓ (%)</th>
<th>CO₂ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal A</td>
<td>0.5</td>
<td>0.1</td>
<td>2.5</td>
</tr>
<tr>
<td>Coal B</td>
<td>0.7</td>
<td>0.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Coal C</td>
<td>0.8</td>
<td>0.3</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Discussion
The key contributions of this paper are a detailed chemical composition for cement making. The organic content can provide a better understanding of the quality of the cement, and the inorganic component can provide a better understanding of the potential for environmental impacts. Both of these aspects are crucial in cement making.

Conclusions
The key conclusion is that the organic content has a significant impact on the chemical composition of cement making. The organic content can provide a better understanding of the quality of the cement, and the inorganic component can provide a better understanding of the potential for environmental impacts. Both of these aspects are crucial in cement making.

References