

## Cement Blends

**Sanjel Energy's industry leading environmental ECObase cement blends deliver higher Environmental, Social and Governance (ESG) standards in our cementing process, minimizing the impact of our operations on the environment while maintaining the performance and productivity of the wells being treated.**

### INNOVATIVE SOLUTIONS FOR COMPLEX CEMENTING NEEDS

**ECObase cement blends significantly reduce the carbon footprint of cement, while providing adaptive, durable well cement slurries. Delivering considerably reduced CO<sub>2</sub> emissions, the base blend is a third-party verified product with a Type III Environmental Product Declaration created under the 2020 Cement Product Category Rule.**

### FEATURES AND BENEFITS

- ECObase blends deliver industry-leading green cement properties while preserving the mechanical properties and proven performance of Sanjel Energy's cement blends.
- Supports the industry's commitment to reduced carbon emissions, contributing to both our clients' and Sanjel Energy's ESG goals.
- Verified 30 percent and 40 percent reduction in Global Warming Potential (GWP) per tonne of cement, compared to the respective Canadian and US averages for cement.
- Reduced carbon footprint by more than 25 percent in GWP per tonne of cement, compared to oil-well Class C and Class G cements.
- ECObase cements are an ideal cement choice for a multitude of subterranean applications across the Western Canadian Sedimentary Basin and beyond.

### APPLICATIONS

- Sanjel Energy has an ECO cement blend for all types of well cementing and remediation, as well as mining applications, pipeline grouting and abandonment, and other industrial pumping uses.

 To learn more about Sanjel Energy Services ECObase cement blends, visit [sanjel.com](http://sanjel.com)

Sanjel Energy's innovative ECO cementing systems provide a broad range of high-performance cementing slurries to tackle the toughest well requirements while also reducing the global warming potential of cementing operations. They are designed to endure extreme pressures and temperatures without compromising integrity, delivering exceptional value to our clients along with industry leading zonal isolation and environmental performance.

## APPLICATIONS

- Conductor / Surface Holes
- Lightweight Cements
- Ultra Lightweight Cements
- Cements to Prevent SCVFs
- Horizontal Laterals / Plug and Perf Cements
- Thermal Cements for Steam Stimulation
- Pipeline and Mining

## ECObase CEMENT SOLUTIONS

**ECObase™**  
**ECOlite™**  
**ECOsuperlite™**  
**ECObond™**  
**ECOprime™**  
**ECOproteus™**  
**ECOgrout™**

## SULPHATE RESISTANCE

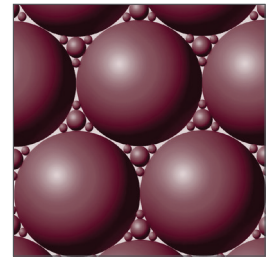


## IMPROVED PARTICLE PACKING

**Traditional Portland Cement**  
 95% Ground Clinker  
 Less than 5% Supplementary Cementing Materials

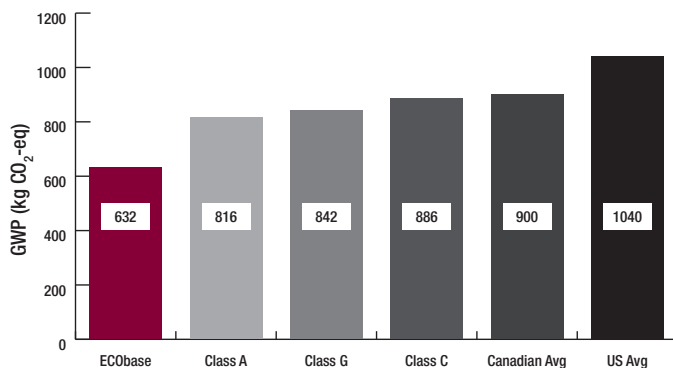


**ECObase**  
 Ground Clinker  
 Supplementary Cementing Materials



- Enhanced particle size distribution
- Reduced porosity through formulation of carboaluminates
- Nucleation creates more surface area for increased precipitation of cement crystals

## GLOBAL WARMING POTENTIAL



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