



Corporate Sustainability Report – 2019



SUMMARY.

Continental Cut Stone, Inc. (CCS) and Continental Cream Quarries, LLC (CCQ) are both owned and controlled by the same family group and are hereinafter referred to as "Continental". Continental wants to operate in the most responsible and sustainable manner that it can – that means to reduce its environmental impacts and to treat their workers, vendors, customers, and neighbors with respect. Certifying to the ANSI/NSC 373 Sustainable Production of Natural Dimension Stone (NSC 373) is a way to show the world that CCS and CCQ are striving for excellence and constant improvement.

And while we know that we are not yet perfect, we are committed to reporting on our progress in a very public fashion. The materials below will give the reader a sense of our progress.

ENERGY USE.

Continental is committed to using as little energy as possible in both its quarry and its mill operations.

Quarry. Over the last 4 years from 2016 to 2019, our total energy usage in the quarry has increased from 114 to 145 kilowatt hours (kWhrs) per ton of stone produced. (kWhrs are a good way to commonsize all kinds of energy use). Tonnage of production is a key variable as is production yield. Production yield depends heavily on color and grain variation in the ledges from which block is cut and is largely uncontrollable.



Figure 1. CCS Quarry Energy Use Per Ton of Dimension Stone. Source: "CCS Quarry 10.1,10.2 \rightarrow "Graphs".





Figure 2. CCS Quarry Energy Use by Type of Energy (kWhrs). Source: "CCS Quarry 10.1,10.2 - \rightarrow "Graphs"

CCS has set a goal of reducing its energy consumption per ton of stone produced by 2%/year over a period of the next 5 years. Off-road diesel consumption, our primary energy usage (80% of total quarry energy usage), will be reduced by monitoring heavy equipment traffic, improving efficiencies in engine performance and reducing haul mileage. Overburden removal and site restoration probably accounts for over 50% of diesel use.

In 2019, energy use per ton of production rose by less than 1% due to an 8% drop in absolute energy use and a 9% drop in tonnage produced. Hopefully, our monitoring and maintenance schedules will reduce energy use in the long term.

<u>Mill.</u> Energy use per ton of finished products (primarily treads, slabs and paving) has been relatively stable in the last four years. Note that the relative energy for processing finished production is about the same as extracting raw block in the quarry.











In general, Mill energy use per ton of production between 2016 and 2019 has been stable at about 138 kWhrs/ton of production. Production tonnage can be quite variable depending on the kind of finished



product involved. Our breakdown of energy usage by type has been stable too - with electricity accounting for 78%, forklift propane for 13% and diesel (loaders) for 9%. We are beginning to look at ways of using renewable solar generated electricity to replace the relatively dirty coal powered electricity of the local grid.

EXCESS PROCESS MATERIALS and SOLID WASTE.

Quarry. Excess process materials (EPM) are all rock that we do not sell or reserve for regrading and rehabilitation of quarried areas. We make every effort to maximize the sale of block from our ledges by carefully handling the materials to prevent breakage in the quarrying process. However, limestone is a natural material, laid down over time with all the variations that a million years can bring. Due primarily to color and grain choices, we sell only about 20% of the stone we quarry. The remainder is moved to our grout pile and reserved for restoration of the site after quarrying stops.

We generate nominal quantities of solid waste and recyclable consumer products. All waste oils and hazardous materials are professionally disposed of through licensed third parties. As seen below, we have little solid waste at the quarry.

	Lbs of Solid Waste/Ton of production	Tons of Excess Process Materials/Ton of production
2016	5.34	4.00
2017	5.12	4.00
2018	4.90	4.00
2019	5.37	4.00

Figure 5. Quarry EPM and Solid Wastes. Source: "11.1-.4 CCS Quarry Inventory 2019-> Charts".

<u>Mill.</u> EPM at the Mill are the parts of the block that are unused (about 40% of the raw materials) and the fines from the sawing processes that are flushed into sedimentation ponds by the process water flowing through the Mill.

	Solid Waste/Finished production (tons)	Excess Process Materials/ Tons of Finished production (tons)
2016	0.0027	1.08
2017	0.0037	1.02
2018	0.0028	1.25
2019	0.0025	1.20

Figure 6. Mill EPM and Solid Wastes. Source: "11.1-.4 CCS Mill Waste Inventory 2018 % Reductions."



WATER.

At the Quarry, all the water used in our operations is rainwater or snow melt that we collect on-site. After use for block production and limited dust control, we recover over 90% of this water for re-use in the quarry.

At the Mill, we recycle every gallon of water that we buy about 30x before we replace it – we are very careful with this resource.

SOCIAL ACCOUNTABILITY.

CCS is a responsible member of the Liberty Hill and Florence communities. All our workers are paid a fair wage and given extensive benefits. Our turnover of personnel is very low and employees often stay for decades. Health and safety regulations are rigorously followed and all employees are trained under a detailed Mine Health and Safety Administration (MSHA) course of study with annual updates required. Personal protective equipment including ear, eye and toe protection are mandatory and both CCS and CCQ have admirable safety records.

Continental also contributes to non-profits in the community, giving both money and stone to local charities.