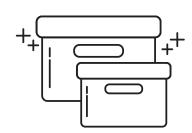
REDUCE CARBON, REDUCE COST

WHAT ARE ORGANIZATIONS DOING?

Contrary to popular belief, an organization can both reduce carbon emissions in its supply chain and remain profitable. Even a small step can make the world more liveable for generations to come.

1 PACKAGING: <u>GENERAL MILLS</u> & <u>CISCO</u>

Did you know that by making packaging tighter and decreasing the amount of dead space, General Mills was able to save more than 400 metric tonnes of paper fiber and cut transportation cost by approximately 500 truckloads a year? In addition, through Cisco's "Pack It Green" project, the company was able to eliminate 1.9 million pounds of material, which is the equivalent of 3.1 million pounds of carbon dioxide emissions and US \$6.1 million in savings.



2 ELECTRICTY: UNILEVER

Unilever generated equivalent to US \$271.9 million in savings by using renewable energy sources such as solar and hydro in 2019, resulting in a 52% reduction in CO2 energy per tonne of production since 2008.

As demonstrated, by switching to renewable energy sources, your company can not only be environmentally responsible, but immensely profitable. While upfront costs may be higher, your utility bill will see a major reduction long-term.



3 ROUTE OPTIMIZATION: UPS & PEPSICO

Did you know that optimizing delivery routes can significantly decrease fuel and labor costs? UPS found that a reduction of one mile per driver per day could save up to US \$50 million. By 2014, UPS ORION project had optimized 10,000 of 55,000 routes in North America saving more than 1.5 million gallons of fuel.

With over 5,000 routes daily, PepsiCo needed a solution that would help them keep costs and environmental impact low. The company used the software Omnitracs to optimize its delivery route. The software has helped Pepsico reduce their routes by 20%.



4 PROCUREMENT: MICROSOFT CORPORATION

Through <u>CDP supply chain program</u>, Microsoft worked closely with their suppliers on disclosing their GHG emissions and setting emission reduction targets in line with climate science. In FY18, their top suppliers reduced their collective footprint by 17 million metric tonnes of carbon dioxide equivalents (CO2e) and saved a total of US \$986.5 million.

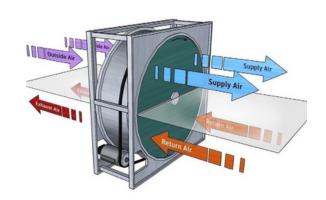




WHAT ARE ORGANIZATIONS DOING?

5 LEED CERTIFIED BUILDING: SOCIÉTÉ DES ALCOOLS DU QUÉBEC

The company installed highly energy-efficient air-to-air heat pump rooftop units and a heat recovery wheel to the base building in 2018 to more than 30 of its retail locations. This resulted in around 22.5% energy cost savings year over year.



6 OPERATION IMPROVEMENT: SPARTAN CONTROLS

Spartan Controls helped their customers cut 900,000 tonnes of GHG emissions through advanced hydraulic fracturing process, improved engines, and multi-well drilling, saving US \$15 million in operating costs.

The new REMVue air-fuel control system would "lean out" the air-fuel mixture (in other words, decrease the amount of fuel needed for combustion), allowing older industrial engines to operate at more optimized air-fuel ratios than originally designed.



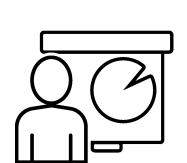
7 FILES: GREENERPRINTER

Did you know that for every ton of Post Consumer Waste (PCW) paper that is used compared to the traditional virgin fiber paper, 3.6 million metric tonnes of CO2 emissions is saved? This is because PCW paper is recycled instead of decomposed in the landfill. Through this process, no new trees get cut down, 75% less water is used, and 45% less energy is required. You can order this paper from companies such as Greenprinter.



8 TRAINING: <u>VANCOUVER FRASER PORT</u> AUTHORITY

The Vancouver Fraser Port Authority set up The Climate Smart program to help businesses reduce energy, fuel and waste, along with associated operating costs. The Port of Vancouver provides 12 port tenants with funding to cover 50% of the cost to participate in the Climate Smart Initiative, helping them collectively eliminate 4,341 tonnes of CO2 equivalent from their operations while achieving US \$1.28 million in annual cost savings.





STAY GREEN, STAY LEAN



Steps to take:





COMPANY ENGAGEMENT

Engagement starts with senior management and permeates through the organization. Hence, senior management buy-in is crucial. Accountability should also be assigned to a senior executive who will ensure sustainability is part of the overall organizational strategy.



ECO - AUDIT

Complete an in-depth carbon footprint audit that includes electricity (kWh), gas (MJ), travel (mileage), fuel (litres), waste (volume and type), and recyclables (volume and type). It can be conducted internally or by a third party such as <u>SGS</u> or <u>NFS</u>.







PROCESS IMPROVEMENT

Focus on creating a culture of continuous improvement across all processes to be more sustainable. A framework that can be employed is Deming's cycle of PDCA.

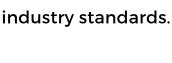
- 1. the **PLANNING** stage consists of data collection and creating a plan by consulting all stakeholders on their takes of sustainability
- 2. The **DO** stage consists of conducting trail runs of the plan with sub-units with an organization
- 3. The CHECK stage consists of verifying the results of the trail runs and making adjustments
- 4. The **ACT** stage consists of the final implementation and monitoring goals and outcomes



SUSTAINABILITY BENCHMARKS

Gain insight into what other companies are doing by reading sustainability reports. Global Reports Initiative (GRI) Standards is the de-facto reporting guideline, with a database of over 74000 organizations. The UN Sustainable Development Goals and the Dow Jones Sustainability Index are good tools to benchmark your company with industry standards.









GREEN RATINGS AND CERTIFICATIONS

Standardized internal and external reporting and tracking to ensure consistent communication through the organization. Information tracking should implicate the impact of sustainable initiatives. If applicable, seek out certification such as, Impact Assessment, LEED, Green Globes, Green Freight Assessment, and SGS.



