Sustainable Togethered Ederated Co-operatives Limited

2018-19 Sustainability Report



About Us

Federated Co-operatives Limited (FCL) is a co-operative that works in partnership with more than 170 independent, locally owned and operated member-owner co-operatives across Western Canada. FCL serves our member-owners, which in turn serve their 1.9 million individual members and many more non-member customers. Together FCL and local member-owners form the Co-operative Retailing System (CRS). Our business operations include wholesaling across all primary consumer goods lines (e.g. food, home and building supplies, crop inputs and livestock), administrative support and marketing programs. FCL also owns and operates the Co-op Refinery Complex (CRC) – which manufactures and supplies petroleum products that are distributed across the CRS.

Co-op is a different kind of business – because co-ops are owned by people who live in the communities that co-op serves. Because these owners are also customers, profits are invested right back into the local economy. While we offer our members and customers high-quality products and exceptional service at fair prices, co-op members also have the opportunity to share in their co-op's success through cash back and equity payments.

Report Profile

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This report highlights FCL's sustainability and social responsibility efforts. Data contained in this report reference FCL's fiscal period from Nov. 1, 2017, to Oct. 31, 2018, with editorial features referencing events up to June 2019.

*Co-op Refinery Complex carbon footprint data is based on the 2018 calendar year.

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8 Ethanol plant purchase supports When we first introduced a report to the community in 2013, it was just that—an introduction to activities already underway.

We highlighted the initiatives we were working on and began a dialogue on what sustainability meant to us. It was a way to frame conversations with our employees, to work together with the 170 locally owned co-ops as part of the Co-operative Retailing System (CRS) and to connect with Co-op members and communities.

Since then, we're proud to say that sustainability is embedded in our planning and decision making. We must continue to create value for our members, and we have to consider how the work we do every day affects our people, our communities and our environment.

What we've come to understand is that sustainability isn't something we do off the side of our desk – it's part of our co-operative DNA. And it isn't the responsibility of few; we all have a role to play. Put simply, it's the foundation upon which FCL and the CRS build sustainable communities together. That's our collaborative, co-operative vision. Our commitment isn't driven by one person or even one co-op; it's all of us together as the CRS committed to the long-term health and resiliency of our communities.

This is something we work toward every day. We're investing in our communities and giving back to our members – it's what we've done for more than 90 years.

We live and work in Western Canada, but the business environments and sectors we operate in are changing around the world. Guided by our co-operative values and the need to be relevant to our members and communities, we're confident that we'll effectively address the complex challenges we face to ensure continued success.

Scott Banda CEO

Large Co-operative of the Year

Award presented by Co-operatives and Mutuals Canada in 2019 Here's a by-the-numbers look at 2018–19 sustainability highlights at FCL and throughout the Co-operative Retailing System.



Diverted **65%** of waste from landfill.

Reduced hydrogen sulphide and polysulphide emissions at the Co-op Refinery Complex by **97%**.

97%



Sourced over **16.5 million** kilograms of fresh fruits and vegetables from Western Canadian farmers.



Acquired the Terra Grain Fuels ethanol plant in May 2019, which has **\$100 million** of economic impact in the region.



Ran an employee contest during Earth Week to promote reusable water bottles, with participation from employees at **11** locations. Provided **\$8.5 million** to **114** projects over the last five years through Co-op Community Spaces.



Launched the Co-op Give Card Campaign in partnership with the Canadian Red Cross, leading to a **\$200,000** donation in 2018.



Registered **164,000** acres in Grown with Purpose, an agronomic program that supports sustainable practices. Funded Co-operatives First, which attended **40** tradeshows and made more than **760** contacts in rural and Indigenous communities across Western Canada in 2018.

\$10.7B

Sales



Net Income

\$789M

Patronage to local co-ops



in salaries and benefits

Co-op connects farm to table

Co-op places a priority on sourcing our food products from Western Canada. Our involvement at multiple stages of the food-production cycle is unique and has developed over time. This cycle moves from supplying growers with fuel and crop inputs and working directly with food manufacturers to stocking the resulting products in Co-op Food Stores.

Farms and gardens

A relatively short outdoor growing season is supplemented by expanded greenhouse operations that allow some products such as cucumbers, tomatoes and lettuce – to be produced locally and be available at Co-op throughout the year.

We support grower research and innovation, whether it's seed varieties or growing techniques, including using LEDs and capturing and reusing heat and carbon dioxide in greenhouses.

"Because of the stability of our partnerships, producers have been able to invest and expand their operations, providing Co-op shoppers with an increasing supply of local, in-season fruits and vegetables grown at home," said Lindsay Young, Procurement and Category Development Manager at FCL.

The Grown with Purpose initiative and our Sustainable Fish and Seafood Policy are also helping ensure we have a safe and sustainable food supply for the long term.

Food manufacturing

We work directly with large and small food manufacturers to produce CO-OP®-brand products, which offer unique value to our customers. These products range from flash-frozen fruits and vegetables from British Columbia to delicate potstickers from Alberta, Italian-style cookies from Manitoba and smoked meats from Saskatchewan.

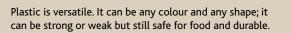
We're proud to support the economic development in northern communities. Our Co-op Gold Pure Fish Fillets – northern pike, walleye and trout sourced from fishers' co-ops – won a Canadian Grand Prix New Product Award in 2019, along with two other local products.

FCL is also supporting the local food manufacturing industry by using resources like the Saskatchewan Food Industry Development Centre, where our smoked meats and fruit spreads are produced. In 2018, FCL invested \$500,000 to introduce canning production and increase condiment production at the Agri-Food Innovation Centre in Saskatoon.

In doing all of this, we continue to build our local communities while providing our members and communities with safe, high-quality products.

We've been sharing stories about Co-op-brand products through our Made by Us campaign since 2017. In 2019, the campaign won the Retail Marketing Award at the Retail Council of Canada's Excellence in Retailing Awards.

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But the world has a plastic problem – it's hard to get rid of it. It doesn't break down easily, and only a fraction is recycled. In some cases, it can't be.

FCL recognizes the need to reduce plastic waste, and we're actively seeking solutions, particularly with single-use plastic. For instance, we evaluate Co-op-branded product packaging and in-store packaging to increase recyclability of materials and reduce the amount of plastic waste entering the landfill.

We've also introduced compostable Co-operative Coffee pods and 100 per cent recycled Co-op Gold Bottled Water. We also ensure that paper and compostable plastic straws are available to local co-ops to offer at their locations.

And we've launched a new program that will reduce the number of single-use plastic bags at local co-ops. Reusable bags are available for purchase, reducing the need for singleuse plastic bags, and, if a customer chooses it, an improved plastic grocery bag will contain 35 per cent post-consumer recycled content. FCL and local co-ops also collect plastic bags and palette wrap to be recycled and repurposed. Between 2014 and 2018, almost 1.2 million kilograms has been repurposed into durable composite decking available at Co-op Home Centres.

We track all the waste generated at our distribution centres, looking for opportunities to divert waste from landfills through donations, composting and recycling. FCL will continue to work with governments, manufacturers and local co-ops to reduce all waste, but especially that created by single-use plastics.



| Waste | 2018 | 2017 | 2016 |
|-----------|------|------|------|
| Diversion | 65% | 52% | 48% |



The gasoline desulphurization splitter column is now the tallest vessel and one of the tallest structures at the refinery. The column is part of \$140-million project to produce ultra-low sulphur gasoline.

50 metres tall165,000 kilograms

Fuelling a Sustainable Tomorrow

The Co-op Refinery Complex (CRC) believes that being an industry leader means making smart choices about our environmental stewardship. In the last year, we've focused on reducing the impact of sulphur in the refining process and the gasoline and diesel fuels we produce.

Capturing emissions

Sulphur is a byproduct of the refining process. We capture it at different points throughout the refinery, process it into a liquid and deliver it to customers by rail for use in fertilizer and other chemicals. Five years ago, we began the process to improve sulphur quality while reducing hydrogen sulphide (H2S) emissions.

A critical part of this was the installation of new equipment in our sulphur plant. The upgrades include the ability to now capture emissions when loading liquid sulphur into railcars. The \$17.5 million investment will result in H2S and polysulphide emissions below 10 parts per million by weight, a reduction of 97 per cent.

"At the CRC, our vision is to be a recognized industry leader in safety, reliability and sustainability," said Gil Le Dressay, Vice-President of Refinery Operations. "The CRC is focused on responsible and innovative business practices and on ensuring we are compliant with industry standards and regulations."

Investing in infrastructure

In addition to this degasification project, we're building two new liquid sulphur tanks. The tanks will be 20 per cent larger, which will provide more storage and minimize potential disruptions for sulphur loading and delivery when one is offline because of inspections and maintenance. We invested an estimated \$27.5 million in this project in late 2016. The tanks are expected to be operational in 2020.

In late 2018, we installed another significant new piece of equipment – a gasoline desulphurization splitter (GDS) column. The 15-storey column is a major part of a \$140-million project that will help us achieve ultra-low sulphur gasoline specifications, which will help produce fuel with higher octane levels compared to what is currently produced and reduce sulphur emissions into the atmosphere.

Benefiting our community

"These projects further the CRC's commitment to environmental sustainability and continue to help us position our operation as a recognized leader within the petroleum-refining industry," Le Dressay said.

Not only will these efforts help us to better manage sulphur, they'll also work in concert with our Wastewater Improvement Project to significantly reduce the nuisance odours that our residential and industrial neighbours in Regina can sometimes smell. In addition to odour reduction, the project will also reduce the hazards associated with liquid sulphur at the CRC. These projects at the CRC are building on our commitment to undertaking sustainable projects that benefit the environment and communities for generations to come.



Reduction in H2S and polysulphide emissions

Carbon footprint

FCL is committed to reducing our carbon footprint while continuing to provide high-quality products and services to our members. Through continual monitoring and strategic implementation of a variety of energy-efficiency measures, our emissions continue to decrease across FCL facilities.

| Carbon footprint | | | |
|--|-------|-------|-------|
| TONNES OF $CO_2 e^1$ (in thousands) | 2018 | 2017 | 2016 |
| Co-op Refinery Complex | 2,003 | 2,030 | 2,062 |
| Crude Oil | 49 | 65 | 126 |
| FCL | 54 | 53 | 55 |
| Total | 2,106 | 2,149 | 2,243 |
| ¹ Carbon dioxide equivalent (CO ₂ e) | | | |







s/Litre

Launching renewable diesel in Canada

While they're made from the same source materials – vegetable oils and animal fats – don't confuse the biodiesel currently in use with next-generation renewable diesel.

Renewable diesel is an ultra-low carbon fuel that can directly replace conventional diesel and is compatible with all existing diesel engines without the need for modifications. It will help reduce greenhouse gas emissions by 30 per cent or more without sacrificing power or fuel economy.

We're launching CO-OP® HCR Diesel in 2019, the first time renewable diesel will be commercially available in Canada. The high-cetane renewable (HCR) diesel will be competitively priced – as part of an agreement with the British Columbia government under its Renewable and Low-Carbon Fuel Requirements Regulation – and available at two locations – Vanderhoof and Quesnel – in northern British Columbia.

Working with local co-ops, we're planning to upgrade five more locations with Co-op HCR Diesel by the end of 2021.

Expanding E-85 accessibility

Regular gasoline contains up to 10 per cent ethanol. However, Flex Fuel Vehicles can use fuels containing much higher percentages of ethanol – up to 85 per cent. This fuel produces fewer emissions while maintaining performance. The finished product has an octane rating exceeding that of premium gasoline. We launched CO-OP® FLEX E-85 GASOLINE™ at Mid-Island Co-op in 2019, with plans to offer the fuel at three more locations by the end of 2021. **O**

| Renewable Diesel | Biodiesel | |
|---|---|--|
| No changes to vehicle fuel system or fuel station equipment | Requires modifications to vehicle fuel systems and fuel station equipment if blended above 5% | |
| Diesel substitute (100%) or blended in any amount | Highest recommended blending level is 5% | |
| Stable in long-term storage | Less stable in long-term storage | |
| Won't absorb significant amounts of water | Retains more water than traditional or renewable diesel | |
| No fuel filter blocking | Increased potential for fuel filter blocking | |

Renewable diesel vs. biodiesel

Renewable diesel and biodiesel may seem similar, but are actually two different products. The following chart provides a brief overview of these differences.

SIRCA takes research underground



Founded and funded by FCL, SIRCA has been bringing together researchers, universities, co-operatives and other industry partners to advance research activities and new technologies since 2014.

We're working with academic and industry partners to study how naturally occurring bacteria in the soil can be used to clean up legacy contamination at petroleum and fertilizer sites.

One research project injects a water-based, nutrient-rich solution – made from treated meat and bone meal from a cattle-processing plant – into the ground. Early trials lead us to believe that this will enhance the growth of micro-organisms to help clean up the soil.

This project is a collaboration between the University of Saskatchewan (USask), Northern Alberta Institute of Technology (NAIT), FCL and UFA, with input from other industry stakeholders – all members of our research collaboration group, Sustainable In-Situ Remediation Co-operative Alliance (SIRCA). The project launched in 2017 with a \$750,000 grant from the federal government, with FCL and UFA each contributing \$75,000 in cash and \$337,500 in-kind support. The first two years were spent developing the additives at NAIT and evaluating them at USask labs.

As the project entered its third year in 2019, the solution is being tested at two sites, including a former Co-op gas station in Alberta. Equipment on site gradually delivers the solution into the ground with ongoing monitoring and assessment.

Projects like these provide training opportunities while developing new methods for cleaning up hydrocarbons that are less expensive and less disruptive than digging and moving soil. These methods are also faster than natural processes, as hydrocarbons can take decades to degrade on their own.

Our goal is to develop and share knowledge so that our historic sites and others across Western Canada can be restored to safe and productive land use that's beneficial to our communities and the environment.

Growing more, growing sustainably

As the global population continues to grow, there is increasing demand to produce more food. New technology – whether it's equipment, crop inputs or seeds – and techniques are helping us grow more than ever before. Thankfully, higher yields and sustainability aren't mutually exclusive.

In January 2019, the Co-op Grow Team launched GROWN WITH PURPOSE™, an agronomic program to evaluate current on-farm practices and provide meaningful strategies to drive yields, enhance soil quality and build a legacy for the next generation.

"It's a comprehensive suite of best management practices that assists in customizing crop plans and management, with 4R Nutrient Stewardship as a cornerstone," said Errin Willenborg, FCL's Knowledge and Innovation Manager.

4R Nutrient Stewardship – using the right source at the right rate at the right time and in the right place – is a set of principles that ensure fertilizer applications are made when and where plants need them the most. In the two years leading up to the program's launch, we provided extensive internal training on these principles to our team and began speaking to growers about their importance. We showcased 4R as part of our Innovation Field Trial Xtreme site in both Saskatoon and Edmonton, proving to the Grow Team and grower-customers the benefits of 4R Nutrient Stewardship. "As part of Grown with Purpose, Co-op Grow Team members work one-on-one with their grower-customers to complete a comprehensive review of on-farm activities," Willenborg said. "This includes a 4R scorecard that is used to help maximize returns from crop inputs while being mindful of the environment."

Following this assessment, we can have conversations with each grower and suggest best management practices in areas such as soil fertility, crop rotations, crop protection, farm safety and recycling. Grow Team members work closely with grower-customers to set benchmarks and goals for continual improvement, starting small and expanding strategies in subsequent years.

Agriculture has a valuable role to play in limiting the impacts of climate change. Innovative climate-smart practices such as 4R Nutrient Stewardship can improve both the quantity and quality of food without compromising food security, making agriculture more sustainable, more productive and more resilient.

We know Western Canadian growers produce crops that are nutritious, safe and sustainable. We know Western Canadian growers are stewards of the land. Grown with Purpose – along with Co-op's unique position operating in both agriculture and food sectors – will help us tell that story. We can help producers capture and verify data so they can show their community, as well as consumers, exactly how their farms are economically, environmentally and socially sustainable.

GROWN WITH PURP®SE...

164,000/55

Acres/customers registered for Grown with Purpose as of June 2019

77%

Percentage of registered acres that meet 4R standards



Grow Team members are 4R Designated

Engaging employees in sustainability

Our Environmental Sustainability Team (EST) has a simple goal – to help our Team Members become aware of and participate in sustainability initiatives.

The EST organizes events including a Riverbank Clean up and Bike to Work Day and hosts lunch and learn events on different topics, such as waste reduction and proper recycling.

During Earth Week in April 2019, we promoted the use of reusable water bottles rather than single-use plastic bottles. As part of the campaign, employees had to submit a photo with their water bottle to be entered into a prize draw. The contest resulted in 125 submissions from 11 FCL locations.

140

Commuters passed through the FCL station on Bike to Work Day in May 2019

300+

FCL employees participated in cleaning up the riverbank since 2013, with more than 60 employees picking up over 40 bags of garbage and recycling in 2018.

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FREE BIKE PARKING



Strategy sets path for diversity and inclusion

We continue to make progress on our diversity and inclusion journey. After initial information sessions and survey of employees in 2017, we launched a comprehensive strategy in January 2019. The strategy, titled Connect + Belong + Grow, provides a roadmap of where we're heading and an action plan on how we'll get there.

The strategy outlines a vision to nurture a welcoming environment for all employees, where they are encouraged to share their perspectives and feel valued for their contributions. Through this vision and established structure, we will work to strengthen the effectiveness of leaders and employees in their everyday roles. We plan to connect initiatives to others across the organization, such as sustainability and social responsibility programs, while focusing on how we serve and partner with our communities.

One way we're implementing the strategy is by developing inclusion networks, such as the Women's Inclusion Network. Networks allow employees to connect, learn and develop with colleagues, and they provide us with opportunities to drive innovation and engagement. Indigenous and LGBTQ2S+ information sessions as well as the Pride Parade and Rock Your Roots Walk for Reconciliation in Saskatoon are other examples of learning opportunities we participated in or hosted in the last year.

We remain committed to having a workplace culture that supports a more engaged, highperforming and innovative workforce. As people are the foundation of the organization, this will provide opportunities to develop and grow together – ultimately to achieve the corporate vision of building sustainable communities together.

Diversity and Inclusion Guiding Principles:

integrity excellence responsibility authenticity inclusivity

Giving times two

We're committed to helping our communities in times of crisis. When natural disasters strike in Western Canada, local Co-ops make donations and fundraise, allow employees time off to help the community and, when possible, keep their doors open to provide relief.

Through the Co-op Give Card Campaign, we donated \$1 from the sale of four specially marked gift cards – available in participating locations throughout November and December 2018 – to the Canadian Red Cross. The campaign provided a way to engage Co-op members and customers, giving them an easy way to share and give in multiple ways.

The campaign is part of a renewed partnership between FCL on behalf of the CRS and the Canadian Red Cross. We'll be donating up to \$1.5 million over five years to support disaster management and emergency response services. With support from our members and customers, we donated \$200,000 to the organization in 2018.

Renewing our partnership with the Canadian Red Cross and introducing Co-op Give Cards are ways that we're continuing a strong tradition of aiding Western Canadians. True to the Co-op spirit, every dollar stays in Western Canada to provide support when help is needed most.

The Canadian Red Cross also awarded us with a 2018 Partners in Humanity Citation. The award recognizes individuals and corporate partners that make an impact at the national or international level, engage volunteers, enhance the reach of the Canadian Red Cross and promote the fundamental principles of the Red Cross Red Crescent Movement.

2018 Partners in Humanity Citation

Award presented by the Canadian Red Cross

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The gift card that gives

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Purchase a holiday-edition CO-OP® Gift Card, and Co-op will donate \$1 to disaster relief.

In support of

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Canadian Red Cross

\$420,000

Donated to United Way campaigns in Saskatoon and Regina by FCL and its employees in 2018

\$240,000

Donated through FCL's Community Investment Fund and Community Builders Program across Western Canada in 2018

Five-year phenomenon

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Co-op Community Spaces celebrated two milestones in 2019 – its fifth anniversary and funding for over 100 projects since the program's inception.

Co-op provided \$2 million to fund 26 projects across Western Canada, bringing the total to \$8.5 million to 114 projects since 2015.

Co-op Community Spaces helps protect, beautify and improve spaces across Western Canada. Registered non-profit organizations, charities and communityservice co-operatives are eligible to apply for capital funding between \$25,000 and \$150,000 for projects in three categories: recreation, environmental conservation and urban agriculture.

\$8.5 million

Amount donated to 114 projects through Co-op Community Spaces since 2015

Capturing the greater impact of all co-operatives

In the summer of 2018, Edmonton's Sisan Fregene traveled to eight communities across Western Canada as part of The Backroad Diaries project.

The concept was pretty straightforward: profile rural and Indigenous communities, the people driving their growth and the co-operative organizations supporting them. There are many co-operatives in Western Canada, but their stories aren't communicated broadly. This project aims to address this gap.

While we often hear about the challenges and decline, many rural and Indigenous communities are actually thriving and growing. The Backroad Diaries project is capturing these positive stories – through video, photos, blogs and social media posts – and how co-operatives are contributing to the success of these communities.

Backroad Diaries is an initiative of Co-operatives First, which is funded by FCL on behalf of the CRS. The goal of Co-operatives First is to promote and support the development of co-ops, particularly in rural and Indigenous communities.

The stories create an emotional connection, prompting people to learn more about co-ops. It's a strategy that provides context and makes an unfamiliar concept like the co-op business model more relatable.

The project captures the diversity of co-ops, with 2018 stories ranging from a rural power utility and grain terminal in Alberta to the Aboriginal Designers Co-op in Winnipeg. The Backroad Diaries entered its second season in the summer of 2019 with two new storytellers and more stories of co-operation in Western Canada.

Read and watch stories at www.thebackroaddiaries.ca.

> Iris Lauzon, one of four members of the Aboriginal Designers Co-op in Winnipeg

Ethanol plant purchase supports business growth

In May 2019, FCL acquired Terra Grain Fuels (TGF), an ethanolproduction facility near Belle Plaine, Sask. The TGF plant is 185,000 square feet and has the capacity to produce 150 million litres of ethanol every year.

Because we operate in both agriculture and energy sectors, this acquisition supports the long-term vision and growth of our business. We have a role to play in reducing greenhouse gas emissions and reducing the carbon intensity – how much carbon dioxide is produced when fuel is burned – and emissions from transportation fuels.

The carbon intensity of conventional fuels can be reduced by using renewable feedstocks. Because the TGF plant can produce ethanol from virtually any starchy grain without needing to switch equipment, it can produce fuels with varying carbon intensities. Pea starch and wheat, which are locally available in Western Canada, produce some of the lowest carbon-intensity ethanol.

FCL and the CRS stand to benefit from this acquisition as it ensures there is a supply of ethanol for manufacturing fuels at the Co-op Refinery Complex. It will also ensure the CRS is able to sell fuel that meets regulations at 780 gas bar and cardlock locations across Western Canada.

In addition, TGF will continue to benefit the larger community, as we have a mutually beneficial relationship with agriculture producers. We supply producers with products and services such as fuel and crop inputs, but we also directly and indirectly purchase their products. The TGF plant purchases more than 400,000 metric tonnes of grain and other starch-rich crops from more than 400 producers. In total, the TGF plant contributes more than \$100 million annually in economic impacts to southern Saskatchewan.

CO-OP

Building sustainable communities together

Financial Highlights

\$449 million in salaries and benefits in 2018

\$1.75 billion reinvested in capital projects in the past five years

\$2.4 billion returned to local co-ops as patronage allocation in the past five years

For more information, please see FCL's 2018 Annual Report.

Net Income

\$1.1**B**

Sales

\$789M Patronage Allocation

\$10.7**B**

Local co-ops across Western Canada received \$789 million in cash and equity from FCL in 2018. In turn, these local co-ops invest in their own facilities and operations, give back to their individual members and support their local communities.

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P.O. Box 1050 401 - 22nd Street East Saskatoon, Saskatchewan S7K 3M9 Canada Phone: 306-244-3311 Fax: 306-244-3403 inquiries@fcl.crs www.fcl.crs

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