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A MESSAGE FROM SMART FUELLING

Summer is officially here, and for many Canadians, that means getting their boats on the water for endless days of fun in the sun. With that in mind, we are featuring boating refuelling tips in this issue of *Insider*, with some additional insight to increase your fuel efficiency.

We are also pleased to be highlighting several green initiatives in the fuel and auto industries, sharing part two of the feature on smart communities, and shining the spotlight on yet another Canadian city that has successfully adopted Smart Fuelling.

We hope you enjoy this issue, and most of all, we hope you have a fantastic summer!

The Smart Fuelling Team.

COMMUNITY SPOTLIGHT: WEST VANCOUVER

On June 6, 2016, the District of West Vancouver announced a partnership with Smart Fuelling. At the time, the District was developing its Community Energy and Emissions Plan (CEEP) to reduce carbon emissions in the community, and city officials determined that a proactive campaign aimed at educating residents on efficient use of fuels could result in reduced GHGs, while also benefitting residents through cost savings.

As a result, the Smart Fuelling campaign was launched in several gas stations and convenience stores in West Vancouver. The District also agreed to support Smart Fuelling through collaborative actions such as social media support and providing hyperlinks on its website.

To learn more about the District of West Vancouver's numerous sustainability efforts, please click here.

HOW CITIES CAN GET SMART TO SAVE ON FUEL: PART 2

In the last issue of Insider, we looked at ways cities can improve energy-efficiency, from land use planning to saving and recycling energy.

Brent Gilmour and Tonja Leach of QUEST say that outer areas are growing 160 per cent faster than city centres, leading to the need for more transportation options and community planning.

Fortunately, smart planning could reduce energy use by 15 to 30 per cent, mostly by reducing the number of vehicular trips people take every day.

How can cities improve on transportation efficiency, and reduce greenhouse gas emissions at the same time?

Invest in transit

Gilmour and Leach say smart communities can reduce individual car trips by creating an efficient public transit system. A good way to do this is with fixed-route systems, such as subways and light rail.

Light rail transit now exists in Metro Vancouver, Edmonton, Calgary, Montreal, and communities in the Greater Toronto Area (GTA) and Hamilton area. Ottawa, Mississauga, Hamilton, Brampton and York are currently developing light rail systems.

"Fixed-route systems establish transit corridors that bring people to the city's core for work and other activities," say the QUEST authors, "making it easier for people to leave their cars at home and contributing to the development of walkable communities."

However, to really reduce emissions, we will need to do much more and continue to innovate when it comes to fuel resources and conservation.

Embrace innovation

Many innovations in the energy sector are already taking place across Canada, according to Gilmour and Leach. These innovations are making the production, distribution and use of energy cleaner, more efficient, more affordable and more reliable, they say.

Alternative transportation fuels are part of this equation. Biofuels (ethanol and biodiesel), natural gas and electricity are starting to become part of the transportation energy mix, enabling communities to find new ways to harness local energy sources for transportation.

Fuel conservation is another important area of innovation, says the QUEST team.

For example, work is underway to improve the internal combustion engine (ICE). Within the next decade, ICEs should be 50 per cent more efficient than they were in 2008. Increasing the efficiency of conventional vehicles is a key way to reduce GHG emissions and energy use, and will help make smart energy communities even more efficient.

Potential solutions for high-density communities will be different than for those that are resource-based.

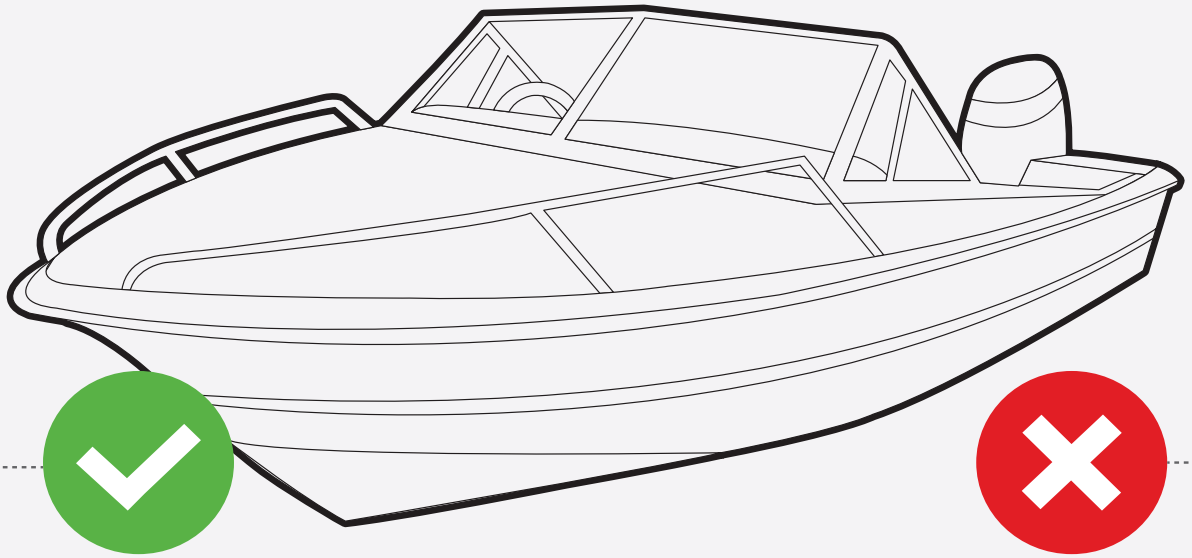
"Each community is unique, with its own set of energy challenges and opportunities," said Gilmour and Leach. "The design and layout of a community significantly influences its energy profile, defining everything from home heating options to transportation choices."

The key to delivering better energy services in Canadian communities is a comprehensive approach that considers land-use planning alongside fuel and technology innovations.

DO'S & DON'TS

FUELLING UP ON THE WATER

When it comes to fuel efficiency this summer, it's important to think beyond the vehicles you use on land. To help keep you safe and reduce emissions while out on the water this summer, we got in touch with officials at the Clean Marine Program, created by Boating Ontario, for their list of refuelling do's and don'ts.



- Do ensure that emergency absorbent materials are available at the gas pump.
- Do ensure the boat is securely moored to the dock.
- Do locate the air vent and install a special overflow container with suction pads.
- Do always keep a rag on hand. The rag should be placed in a vented container once used.
- Do switch off all of the boat's electrical circuits.
- Do close all ports and deck hatches.
- Do turn off engines.
- Do turn on the blower for 5 minutes before starting the engine.

- Don't remain on the boat while refuelling.
- Don't walk away from the boat.
- Don't overfill.
- Don't ask for a "top up" as the fuel expands and the tank may overflow if filled to the brim.

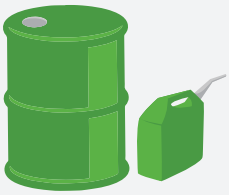
OTHER THINGS TO CONSIDER TO INCREASE YOUR BOAT'S FUEL EFFICIENCY:

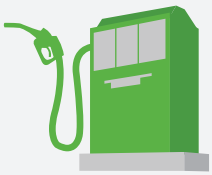
- Boaters should consider going to newer engines like an Opti-Max or e-Tech technology as they are more fuel efficient and release less hydrocarbons to the atmosphere.

To learn more about the Clean Marine Program, visit: http://www.boatingontario.ca/cpages/clean-marine-program

INDUSTRY DEVELOPMENTS THAT HELP REDUCE ENVIRONMENTAL IMPACT

Over the last decade, fuel and auto companies have taken several strides to reduce their carbon footprint and be more environmentally-conscious, while continuing to play a key role in the Canadian economy. Below, we have highlighted several initiatives that are helping to reduce the impact of these two industries on the environment.





Improved fuel efficiency in light-duty vehicles. While there is a lot of buzz about new technologies such as battery electric vehicles (BEVs), a large majority of Canadians still rely on internal combustion engines (ICE) with close to 26 million light-duty vehicles currently on the road. Auto-makers have continued to improve their vehicles, and 2015 Environment Canada data shows a 20 per cent improvement in fuel efficiency in light-duty vehicles over the last decade, with a 50 per cent improvement projected for light-duty vehicles by 2025, according to DesRosiers Automotive Consultants Inc.

Cleaner gasoline and diesel. Efforts by the refining industry to develop cleaner gasoline and diesel have led to the elimination of lead from gasoline, cutting benzene content to less than 1 per cent of volume, and reducing sulphur levels by 90 per cent in gasoline and by 97 per cent in diesel. Combined with new vehicle technology, lower sulphur content in gasoline has reduced smog-forming emissions from a 2005 vehicle or newer by 90 per cent when compared to a 1993 model, according to the Canadian Fuels Association.

Investments in new equipment and procedures. Companies are continually looking for ways to upgrade their equipment to do things more efficiently and in a more environmentally-friendly manner. Fuel retailers have invested in automatic tank gauging equipment and have applied strict fuel delivery procedures to prevent spills and overfills.

Stringent maintenance and inspection procedures. The fuel industry faces some of the most stringent testing measures on its products. Many companies also routinely conduct inspections on inventory levels to quickly identify any potential leaks.

Improved waste management. The use of semi-underground containers is now quite common in the fuel industry. The containers not only help prevent waste spills, they also allow for a much faster emptying process, which reduces emissions produced by the transportation vehicles that pick up the containers. In addition, many fuel retailers participate in enhanced recycling programs such as Manitoba's Recycle Everywhere program, and are active in Used Oil Management Associations across Canada to help further reduce waste.

As Canada has committed to reducing its greenhouse gas emissions by 30 per cent below 2005 levels by 2030, providing cleaner fuels and cleaner technology for Canadians will continue to be one of the top priorities for the auto and fuel industries going forward.

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BECOME A PART OF SMART FUELLING

Want to join in our efforts to help Canadians improve their fuel efficiency and reduce greenhouse gases?

We are always looking for new industry partners and municipalities who want to inform and motivate consumers through Smart Fuelling. Whether it's a helpful fuel efficiency tip on a fuel pump, a handout at a gas station convenience store or information on your website, we can all work together to create a better, cleaner tomorrow.

Join West Vancouver and many other communities that have already implemented the program today! Call us at (613) 470-8555, email us at admin@smartfuelling.ca, or sign up to receive our updates on smartfuelling.ca. We look forward to the opportunity to partner with you to set a positive precedent to reach Canadians everywhere!

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*How Cities Can Get Smart To Save On Fuel first appeared in the Canadian Fuels Association Blog in January 2016.

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