34 YEARS OF SERVICE
Marvin Odum begins new chapter.

TACKLING WATER ISSUES
Employee becomes citizen scientist.

REDUCING RAIL LEAKS
Best practices shared with the front line.

DRIVING FUTURE LEADERS
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Each year, Shell Eco-marathon provides hands-on learning opportunities for many high school and college students. The competition features a wealth of innovative talent. In this issue of AlumniNews, we highlight some of these talented individuals and share why they made the choice to bring their talent to Shell.

Also in the issue, we have news on the Motiva joint venture, how Shell is reducing leaks during product transport and the latest news on a proposed petrochemicals site in Pennsylvania. We invite you to read about Marvin Odum’s contributions to Shell over the years and why Canada Country Chair Michael Crothers calls for a shared sense of vision in tackling climate change.

Be sure to check out our regional section of the magazine for more news of interest, as well as updates on alumni activities in your area. And don’t forget to send us story ideas for the Alumni Features section of the magazine. Our contact details can be found at the bottom of this page. We look forward to hearing from you!

Have a wonderful summer!

Heather Pray Russell and Jackie Panera
Editors, AlumniNews magazine

A passion for people, performance
Downstream senior leader returns to the U.S.

Maintaining a competitive focus
Shell and Saudi Aramco to end joint venture.

Driving future leaders
Current Shell employees reflect on participation in Eco-marathon.

Safety at the forefront
Work continues at proposed petrochemicals site.

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Creating a shared vision
Michael Crothers addresses the economy, environment.

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To submit story ideas for the U.S., email ShellUSAlumni@shell.com or mail a letter to Shell Oil Company Communications – Heather Pray Russell, P.O. Box 2463, Houston, Texas 77252-2463.

To submit story ideas for Canada, email PublicAffairs-Canada@shell.com or mail a letter to Jackie Panera, Shell Canada Limited, 400 4th Avenue S.W., P.O. Box 100 Station M, Calgary, Alberta T2P 2H5, Canada.

STORY IDEAS WELCOME!

AlumniNews magazine is looking for recent story ideas for our Alumni Features section! In this part of the magazine, we highlight alumni who are staying active and making a difference in retirement. If you know of someone who would make a great profile for the magazine, please send us his/her phone number and email address, along with a brief description of the story idea.

CHECK US OUT ONLINE!

Visit www.shell.us/alumni for everything alumni.

Need forms? Want back issues of AlumniNews magazine? Visit our Shell alumni website for helpful links and phone numbers and the latest news on Shell. Also, connect with us by emailing ShellUSAlumni@shell.com to give us feedback and tell us what you’d like to see on the site.

GO GREEN!

U.S. AlumniNews moving to a digital version starting December 2016

Beginning with our December 2016 issue, AlumniNews will be delivered in an electronic format and will no longer be offered as a printed and mailed publication. We invite all subscribers to sign up online at www.shell.us/alumni or by email at shellusalumni@shell.com. We will notify you directly when the latest version of AlumniNews is posted online each quarter.

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She’s worked around the world, from Hong Kong to The Hague. Now, Manufacturing Executive Vice President Lori Ryerkerk returns to the U.S. as local senior Downstream representative (LSDR) for the country.

“I’m glad to be coming home,” says Ryerkerk, an Iowa native who began her career at a Louisiana refinery. “This is a great opportunity to be a part of Shell’s senior leadership in the U.S.—a country that plays an essential part in the long-term success of downstream, in particular, and Shell, in general.”

As LSDR, Ryerkerk will drive integrated behaviors and decision-making, which, in turn, will help ensure the delivery of Downstream plans and objectives in the U.S. She will serve as a member of the Country Coordination team, playing a major role in representing Shell, both internally and externally, in the country. The LSDR is a key support to Country Chair Bruce Culpepper, ensuring the protection of Shell’s license to operate and overall sustainable performance in the U.S.

“I’ve spent the vast majority of my career working in downstream,” she notes. “I know that’s why I’m so energized when I visit our Downstream assets, meeting and working with people who have the passion and capability to really deliver value to Shell.”

With a degree in chemical engineering from Iowa State University, Ryerkerk began her career on the front line as a process technologist. That experience sparked her enduring belief that everyone, from front line to leadership, has a part to play in sustainable business success.

She rose through the ranks at ExxonMobil, then moved to Hess Corporation. In 2010, Ryerkerk joined Shell as Manufacturing’s regional vice president for Europe/Africa. In October 2013, she was appointed executive vice president of Manufacturing.

“Motiva’s performance has been transformed in the last two years,” says Downstream Director John Abbott. “We propose to combine the assets we will retain from the joint venture with Shell’s other Downstream assets in North America. This is consistent with both the Group and Downstream strategy to provide simpler and more highly integrated businesses which deliver increased cash and returns.” As part of the proposed asset division, Shell would assume sole ownership of the Convent and Norco refineries, while Saudi Aramco would retain the Port Arthur refinery.

The process is expected to be complete in 2016, pending necessary approvals. The intent is that staff will remain within their respective assets and become employees of the acquiring company.

Day-to-day operations at Motiva will continue as usual, with the focus on operating safely and continuing to meet the needs of retail and commercial customers. A comprehensive supply strategy is in place to ensure stable supply to retail and commercial customers.«
In 2013, University of Colorado at Boulder teammates Austin Schipper and Paul Sweazey posed together for a photo on the floor of the George R. Brown Convention Center in Houston with a singular goal: to travel the farthest distance on the least amount of energy. Little did they know that energy production at Shell’s Martinez Refinery would be a shared goal for them in their professional careers just three years later.

“I wasn’t planning to work in the oil and gas industry, but one of our Capstone projects fell through and opened the door to be a part of the Shell Eco-marathon team,” Schipper says. “So many mechanical engineers leave college and don’t know how to tighten a bolt, but 90% of my hands-on learning came from being a part of Shell Eco-marathon.”

Sweazey, who participated and graduated in 2012, assisted Schipper’s team in 2013. “At the Eco-marathon itself, I noticed how Shell employees worked well together,” Sweazey relates. “Everyone was super reasonable with each other and had clear communication. Everyone seemed happy to be there and had a good vibe.”

With positive experiences at Shell Eco-marathon and the guidance of Shell university recruiters, the rest, as they say, is history. At Shell’s Martinez Refinery, Schipper is a rotating equipment engineer and Sweazey serves as a pressure equipment engineer.

**Meaningful experiences, enriching opportunities**

Other employees reflect on their Eco-marathon experience and how it prepared them for a career with Shell.

“We had to raise our own money, schedule enough time and budget, knowing there were deadlines we had to make to be ready to drive our vehicle to California.”

Greg Paluska, Shell technical lead for Fleets and Mining and Colorado University-Boulder graduate

“Exposure in the Shell Eco-marathon put me in the forefront of employers and gave me the opportunity to take the design practice out of the classroom and do the implementation. It added a richer experience.”

Matthew Sponiar, operations engineer at Groundbirch and founding member of the Shell Eco-marathon team at the University of Alberta

“Eco-marathon was a great way to get involved in possibly one of the greatest challenges and opportunities for the next century forward: shifting the energy systems in a systematic fashion.”

Paul Lee, drilling engineer-in-training in Canada and founding member of the Shell Eco-marathon team at the University of Waterloo

“We had to start with an idea and turn it into something to drive on the road. There were a lot of stages to go through to get from start to finish. It was an invaluable opportunity.”

Dudon Wai, drilling engineer-in-training and founding member of the Shell Eco-marathon team at the University of Waterloo

“Just because you don’t win, doesn’t mean you lose, either.”

Noah Joost, facilities engineer on the Permian Surveillance and Technical team

“A part of the project was about working with a diverse amount of people with different backgrounds. The student team on campus wasn’t just limited to engineers. We worked with students of all different levels. A huge part of working at Shell is based on diversity and how we work together on a team. It really helped prepare me to be an employee here.”

Nancy Peng, rotating equipment engineer-in-training for the Shell Albian Sands assets and University of British Columbia at Vancouver graduate

**DRIVING FUTURE LEADERS**

Current Shell employees reflect on participation in Eco-marathon
There is an old African proverb that says, “If you want to go quickly, go alone. If you want to go far, go together.” Shell’s Meera Nathwani-Crowe and Chris Fry are taking the “together” approach to finding solutions to complex environmental and economic challenges. The two are participating in Energy Futures Lab, a diverse group of experts and informed opinion leaders in energy, environment, policy, community and sustainability who are working together to design a viable energy strategy for Alberta.

“It’s a huge opportunity to work among a broad group with diverse views, explore the challenges and opportunities we have in Alberta and design a strategy that serves our province’s economic and environmental needs—not just for today, but for the future,” says Nathwani-Crowe, who manages environment and technology for Shell’s Heavy Oil business.

Fry, external relations consultation adviser for Unconventionals, says he applied initially not as a representative of Shell, but as a concerned citizen who felt he could add value to the initiative given his unique insights and experience.

The social lab creates a methodological process to achieve shared understanding of the problem before starting to create solutions. While such “change labs” have been around since the early 1990s, the Energy Futures Lab is unique in that it uses a science-based understanding of sustainability as its foundation.

“Energy Futures Lab brings together different, often opposing views and perspectives, to engage in a rational, balanced discussion about the future,” Nathwani-Crowe says. “It’s a lab, so a bit of an experiment. We don’t know what the outcome will be. But it moves us beyond the divisiveness we have seen on this and further toward sustainable long-term solutions.”

Shell Canada was recently named Canada’s Best Diversity Employers for its exceptional workplace diversity and inclusiveness programs. The competition recognizes successful diversity initiatives in a variety of areas, including programs for employees from five groups:
- Women
- Members of visible minorities
- Persons with disabilities
- Aboriginal peoples
- Lesbian, gay, bisexual and transgendered/transsexual (LGBT) peoples

Diversity and inclusion has always been a top priority for Shell Canada. The company works to embed in its culture its diversity strategy, which drives recruitment.

The same day of the announcement in the Globe and Mail, the newspaper featured an article with Calgary employees Trish Moore, vice president, Human Resources Operations, and Lydia Courteoreille, terminal manager.

“From my perspective, there are lots of opportunities at Shell, and it’s equal for everyone,” Courteoreille says. “I always felt there were ceilings for me in the past with other companies. There are no ceilings for me at Shell.”

“A diverse workforce and an inclusive work environment are vital to our success and are aligned with our core values of honesty, integrity and respect for people,” Moore says. “Shell benefits from a diverse workforce through a stronger market focus, the ability to attract and retain top talent and the strengthening of our productivity.”

To read the feature article from the Globe and Mail, visit www.canadastop100.com/diversity.
QUEST CELEBRATES MILESTONE

Student captures learnings from project

Half a million tons and counting. Since opening in November 2016, Quest—the world’s first carbon capture and storage project in Canada’s oil sands—has already passed its first milestone. The project is designed to capture more than 1 million tons of carbon dioxide (CO₂) each year.

Shell is sharing its learnings on Quest and is collaborating with the Energy Technologies Institute and Birmingham University to increase awareness and education around CO₂ pipelines in the UK and other parts of the world.

Chemical engineering Ph.D. candidate Bilaal Hussain is on the ground at Quest for an eight-month assignment to collect learnings to bring back to the UK. Hussain is working out of the Scotford Upgrader where he is using data from the Quest project to develop models in the modeling tool, gCCS. His work will analyze how Shell operates pipelines from a CO₂ perspective. He plans to publish his learnings, making the information publicly available to industry, academia, government and others.

“Sometimes people from the UK and throughout Europe do not know the great work that is happening right in Canada and Shell’s important role in addressing climate change,” Hussain says. “I look forward to shedding some light on the important work being done with Quest to address global concerns in a real way.”

‘LOWER FOR LONGER’

Thriving together in a low oil price environment

Senior executives discussed how to thrive in a “lower-for-longer” oil price environment at Shell’s recent Heavy Oil Supplier Summit in Calgary. Kerry Margetts, general manager, Contracts and Procurement (CP) for Heavy Oil and Unconventionals, says the Supplier Summit is the perfect opportunity to work together for a common goal. “The summit helps build collaborative relationships with our vendors so we can discover new ways of working together and realize opportunities that increase our chances for success,” he says.

Margetts says that despite low oil prices, Shell saw great success in many areas last year. “In 2015, about $250 million in cost savings was delivered by contract management teams, which involves contract holders and CP working together. Of this amount, roughly 22% was due to price and rate reductions, while 78% was driven through active contract management and doing things differently.”

Finding ways to change the status quo is critical, according to Margetts. “Fundamentally changing the way we work at site—whether through reduced scope, demand, specifications, productivity improvements or other cost reductions—has delivered a huge portion of cost savings. He notes that collaboration and alignment between Shell and its vendors are key to this accomplishment.

The Heavy Oil Supplier Summit featured presentations by Zoe Yujnovich, executive vice president, Heavy Oil; Peter Zebedee, general manager, Shell Albian Sands; and Michael Frigge, general manager, Scotford Upgrader. Each provided business and site-level perspectives on priorities and expectations. The summit also featured a series of workshops designed to deepen engagement on key topics, including safety (with an emphasis on hand line-of-fire injuries), productivity improvements and cost savings in a lower-for-longer environment.

“The urgency with which we need to address cost performance has never been greater than now,” Yujnovich says. She noted that based on the 2015 track record, there is no reason to set limits on what can be delivered. “We need to focus on the things in our control and think about how to set ourselves up for the future. I believe our future looks strong.”

Shell gave out three Contractor Excellence Awards to recognize vendors that excelled in safety, value improvement and collaboration during 2015. Vendor Finning was commended for initiating a cost-control program that generated approximately $23 million in savings. Laird received an award for achieving over 1,300 days at Goal Zero and over $10 million in cost savings. And Jacobs received an award for taking the initiative to execute a barrier-removal program at Scotford which increased worker productivity and efficiency, generating over $8.4 million in savings.

Shell has hosted the Heavy Oil Supplier Summit annually since 2009. The events focus on improving safety, increasing collaborative discussion and forming action plans, which ultimately improve business performance.
Shell recently celebrated excellence in the aboriginal community at the Indspire Awards, which recognizes indigenous professionals and youth who demonstrate outstanding achievements that promote self-esteem and pride in their communities.

Shell Canada Country Chair Michael Crothers joined hundreds from across Canada at the awards event. “It is a privilege for Shell to work closely with these amazing, talented young indigenous leaders to advance valuable programs and to create opportunities to showcase the great contributions they are making in their communities and to Canada overall,” Crothers says.

Indspire is dedicated to providing the necessary tools for indigenous peoples to achieve their potential. Over Shell’s 30 years of involvement with Indspire, the company has invested over $3.3 million to support a variety of programs, most recently Industry in the Classroom: Careers in Oil & Gas.

Canada’s aboriginal peoples are important neighbors to Shell in many communities where the company operates across the country. They are considered Canada’s fastest-growing workforce population.

**Industry in the Classroom: Careers in Oil and Gas**

The night provided an excellent opportunity for Shell to introduce 150 youth to its Industry in the Classroom: Careers in Oil & Gas module, which launched in 2014.

“This program, delivered through our partnership with Indspire, is aimed at the needs of indigenous youth and helping them realize their potential,” Crothers says.

Since its launch, Shell has supported or facilitated 40 sessions for approximately 500 students, ages 15 to 19, in communities near the company’s operations. There are now 30 trained facilitators and 10 sessions a year slated for 2016 and 2017.

Jeff Murrell, Lambton College associate dean of Apprenticeship & Trades Training, explains that the module is helpful in providing a more informed and well-rounded view of the oil and gas industry. “One of the young men who was only 16 years old said he should stop complaining about pipelines and get an education that leads to a job so he can solve the issues with pipelines. Through the Industry in the Classroom: Careers in Oil and Gas module, he gained an entirely new perspective.”

**DID YOU KNOW?**

In 2015, the Canadian Council for Aboriginal Business awarded Shell Canada Gold status in Progressive Aboriginal Relations. The Gold standing shows that Shell is a good business partner with communities, a great place to work and is committed to the prosperity of aboriginal communities.

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**RETIREMENTS**

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<tr>
<th>NAME</th>
<th>LAST POSITION</th>
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<td>Keith Blinston (March 2016)</td>
<td>Venture Support Manager, Real Estate</td>
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<tr>
<td>Ed Cargill (April 2016)</td>
<td>Caroline Gas Plant Front End Operations Coordinator</td>
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<td>Rose Chan-Mountain (April 2016)</td>
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<td>Brian Denniss (April 2016)</td>
<td>Business Opportunity Manager – Scotford Manufacturing</td>
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<td>Cherry Dodge (April 2016)</td>
<td>Vice President, Information Risk Management</td>
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<td>Corine Jansonius (April 2016)</td>
<td>Data Modeler</td>
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<tr>
<td>Walter Kosterman (March 2016)</td>
<td>Technical &amp; Process Safety Manager – Heavy Oil</td>
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<td>Richard Lehner (March 2016)</td>
<td>Geophysicist</td>
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<tr>
<td>Anita Spence (April 2016)</td>
<td>Project Manager, Quest Carbon Capture and Sequestration Project</td>
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<td>Dianne Teixeira (April 2016)</td>
<td>Sr. Buyer, Contracting &amp; Procurement</td>
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<tr>
<td>Randy Wachowicz</td>
<td>HSSE Systems Manager, Shell Albian Sands</td>
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USEFUL INFORMATION

Shell Benefits Centre
To view your coverage, find information about plans and make changes when appropriate, contact the Shell Benefits Centre:
- Toll-free at 1-877-550-3539 (1-416-390-2633 if outside Canada and the U.S.) from 6 a.m. to 6 p.m. Mountain Time any business day, or
- Go to www.mybenefitscentre.com/Shell and use the message centre.

User ID: Last six digits of your Shell People Personnel Number

In the event of the death of a retiree, spouse of a retiree or dependent, contact the Shell Benefits Centre. The Shell Benefits Centre will help initiate any applicable insurance claim process and will also help manage the necessary changes to your benefits and pension.

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Sun Life Financial administers health and dental benefits. For assistance with health and dental claims and coverage information, contact the Sun Life Financial Customer Care Centre:
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- Go to www.mysunlife.ca to visit the Sun Life Financial Member Services website and select Secure messages.

Emergency Travel Assistance
For emergency travel assistance, contact Europ Assistance USA Inc. (Europ Assistance):
- Toll-free at 1-800-511-4610 in Canada and the U.S.
- Collect at 1-202-296-7493 from outside the U.S.
- From Cuba by calling 66-12-12 for an international operator. Ask for 1-202-296-7493 (collect call). In Cuba, toll-free dialing or calls from public phones are not available.

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To view your life insurance coverage, find and link to information about the plan and make beneficiary changes, contact the Shell Benefits Centre:
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HR Service Desk Americas
For pension payments, T4, T4A, income tax and all other questions, contact the HR Service Desk Americas:
- Toll-free at 1-800-663-9898 (1-403-691-2900 if outside Canada),
- Email shloil-hr-service-desk-americas@shell.com.

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SAFETY AT THE FOREFRONT

Work continues at proposed petrochemicals site

In the last year, Shell has undertaken early preparation work at its Project Franklin site in Pennsylvania, following the demolition of the former Horsehead assets. The latest development, which is part of the planning phase of a proposed petrochemicals complex, includes completion of a heavy-haul bridge that will be used to mitigate traffic delays during the ongoing site preparation.

If built, the proposed petrochemical complex would be the first major U.S. project of its type built outside the Gulf Coast in 20 years. The facility would convert ethane into approximately 1.6 million tons of polyethylene per year.

The 345-foot-long bridge stands 34 feet above the state road and an industrial rail line. The bridge will allow “triple-seven” dump trucks to move approximately 3 million cubic yards of dirt over the highway and the rail line without interrupting traffic or creating mud on the roadway.

Safety continues to be at the heart of this early work. “Even in the planning and site preparation phase, safety is our top priority,” says Graham van’t Hoff, executive vice president, Chemicals, who visited the site in early February. “It was good to speak firsthand with the Shell team and contractors about safety challenges and accomplishments.” Shell’s safety culture has been embraced by contractors on the site, with many noting that the project is more safety-focused than others they have worked on for other companies.

“We start with the fundamental belief that Goal Zero is achievable,” says Ate Visser, vice president, Appalachia Petrochemicals Project. “We know if we are to deliver a stronger collective safety result in 2016 and beyond, the commitment to safety must rest with each project member—from the hands in the field up through leadership, including me.”

34 YEARS OF SERVICE
Marvin Odum begins new chapter

Since the day a young mechanical engineer walked through the doors of Shell 34 years ago, Marvin Odum’s contributions to the company have led to a long and distinguished career in which he has played a central role in some of the company’s most transformative moments.

Leading the industry
Throughout his time at Shell, Odum held numerous commercial and technical leadership roles across Shell’s businesses. He became U.S. country chair in 2008, and soon after in 2009, he joined the Executive Committee as Upstream Americas director.

As country chair, Odum led Shell through the Macondo oil spill, positioning the company as a lead spokesperson across the industry for what needed to be done to ensure safe drilling in the Gulf of Mexico. He also played a pivotal role in the decision to move ahead with Alaska, managing a complex and challenging portfolio of stakeholders. Prior to his role as country chair, Odum was instrumental in re-opening One Shell Square in New Orleans following Hurricane Katrina.

During his career, Odum spent a great deal of time engaging with leaders in the public, private, media and non-governmental sectors on a wide range of energy policy issues. He’s been consistently recognized for his business expertise and dignified leadership, including his ability to converse rational conversations on energy transitions and the environment.

In addition to his business leadership, Odum channelled his passion for developing the next generation of leaders through service on numerous boards, councils and think tanks. Recently, Odum spoke with University of Pennsylvania students on the energy transition and commitment to safety and people are hallmark characteristics.

A fond farewell
During a farewell celebration for Odum at Houston’s Woodcreek campus, CEO Ben van Beurden talked about Odum’s sense of calm and poise, and the critical role Odum played in the U.S. for Shell. “When history has finished writing this chapter of Shell, Odum will be in the middle of it,” he said. Van Beurden also took the time to thank Odum’s wife Mariloli for her dedication and support.

The celebrations included a speech from former Shell president Jack Little, who described his early days of working with Odum. He recalls a young man who clearly stood out from his peers. “His strong technical foundation, his work ethic, his ability to present his ideas and his desire to learn new skills are what set him apart,” Little said.

Houston Mayor Sylvester Turner praised Odum at the event as a native Houstonian who never forgot his roots. Mayor Turner then presented Odum with the keys to the city. «
CREATING A SHARED VISION

Michael Crothers addresses the economy, environment

Canada Country Chair Michael Crothers called for a shared sense of vision in tackling climate change during the March Globe Leadership Summit in Vancouver. Addressing business leaders, government and other stakeholders, Crothers remarked on the hurdles Canadians have overcome in the country’s nearly 150 years, including nation-building efforts, two world wars and designing and implementing universal healthcare.

“When I look back on these and other examples, I’m struck by three key elements common to each hurdle we’ve overcome. Firstly, we had a shared sense of vision. Secondly, a practical plan was set. And lastly, there was tremendous collaboration and a sense of urgency to act in the greater public interest,” he said.

Crothers acknowledged that decarbonization will define the coming decades. “It might come as a surprise to learn that globally Shell was among the first oil and gas companies to acknowledge climate change, and we have been calling for a price on carbon for nearly two decades,” he said. “We recognize that transitioning our energy system will be a huge challenge and we must square our vision for decarbonization with the growing demand for energy.”

He noted, however, that hydrocarbons will remain the primary energy source for some time. “That isn’t just Shell’s self-fulfilling prophecy. Groups ranging from the National Energy Board to the International Energy Agency forecast that energy demand will rise due to a growing global population and higher living standards. It’s important to remember that today, some 3 billion people still lack access to the modern energy many of us take for granted.”

The solution is not a choice between renewables or hydrocarbons, asserted Crothers. “Both will be vital to meeting demand in the coming decades. Shell expects renewables to eventually become the largest component of the global energy system towards the end of the century. Indeed, Shell sees major opportunity, particularly for solar, where one of our scenarios shows it could become the world’s largest primary energy source by 2060 and for wind where we have projects globally.”

Crothers says that while Shell shares much of the same vision as those in the environmental movement when it comes to decarbonization, the company differs on the pace of transition. “In order to meet the projected energy demand by 2050 while controlling climate change, we will need to DOUBLE the world’s energy supply from 2000 levels, while, at the same time, dramatically reducing the world’s CO₂ emissions. This is an incredible challenge. But I believe if given the right frameworks, human ingenuity will prevail.”

With well-designed policy frameworks that balance energy needs with environmental protection and provide incentives to spur innovation, Crothers is confident that Canadian ingenuity will prevail. “We are a country of resourceful people. We figured out how to take the oil out of the sands. We’re learning how to get more carbon out of the oil. Canadian ingenuity will be key to unlocking lower-carbon solutions that can be exported, generating new revenue streams.”

Crothers remarked that Shell invests in lower-carbon energy, particular natural gas production and technologies that increase energy efficiency and reduce emissions. “We also have a strong focus on low-carbon transport fuels where we’re one of the world’s largest producers of low-carbon biofuels. And, we operate carbon capture and storage technology.”

Noting that the energy policy and business decisions made over the next five to 10 years will be critical, Crothers said that Shell is committed to innovate and deliver energy responsibly, working with businesses outside of its own industry. “It is clear to Shell that if we aren’t part of the climate change solution, the solution won’t include our industry.”

He noted initiatives supported by Shell, including Smart Prosperity, which has outlined a vision to increase Canada’s economic and environmental competitiveness. Shell is a founding member of Smart Prosperity through the involvement of Shell’s former Canada Country Chair, Lorraine Mitchelmore, who continues to co-chair the initiative. “Shell shares the group’s ambition to see a stronger, cleaner economy that builds a better future for all Canadians,” Crothers said.

The Globe summit provides a forum for business leaders, government and other influencers to collaborate on ways to leverage markets and innovation to turn environmental challenges into business opportunities. Prime Minister Justin Trudeau announced at the summit a $75 million investment to help address climate change challenges. To read Crothers speech in full, visit www.shell.ca. «
TACKLING WATER ISSUES

Employee becomes citizen scientist

It’s the abundant resource that we all too often take for granted—free-flowing clean water, available any time we turn on the tap.

But the truth is water is not nearly as abundant as we think. More people die from poor water quality each year than from all forms of violence, including war.

Lisa Clegg is a compensation adviser for Shell in The Netherlands. After taking the opportunity to do something about the issue and become a citizen scientist, Clegg is now armed with some surprising information. “We think of our planet as mostly water, but only 2.5% is fresh water,” she says. “It works out that only around 0.007% of the world’s total water is available for human use. It’s absolutely vital we look after it.”

Thanks to a Shell-backed initiative, where employees can team up with the FreshWater Watch program (run by Shell environmental partner Earthwatch), Clegg now ventures out to collect data from local ponds, lakes and wetlands. This data is shared in a global database with Earthwatch scientists, who use it to help generate meaningful solutions to the world’s freshwater issues.

What Shell is doing

Water is an essential resource for Shell’s operations. We need a reliable supply of water for many of our activities—from drilling and flooding wells to refining crude and producing biofuels. Water is also often a waste byproduct and must be recycled and disposed of safely.

At Shell, we are taking steps to manage our use of fresh water in a responsible and sustainable way. We have developed tools to better understand our water footprint, an important step toward prioritizing our improvement efforts.

The following are just two examples of Shell’s water-preservation efforts:

- **Recycling at Pearl.** The Pearl gas-to-liquids (GTL) plant in the Qatari desert was designed to put minimal pressure on the country’s limited freshwater resources. Large amounts of water are produced during the GTL process. This water is then cleaned and reused. Pearl GTL’s industrial water processing plant is the biggest of its kind, making full use of water produced within the plant for power generation and cooling. The plant can treat 280,000 barrels of water per day—equivalent to the water needs of a town of 140,000 people.

- **Innovation at Groundbirch.** To protect fresh water near our Groundbirch natural gas asset in British Columbia, Shell partnered with the city of Dawson Creek on the Dawson Creek Water Facility. Since September 2012, the facility has been treating the city’s wastewater for reuse in the industry and community. The non-potable water source has allowed Shell Groundbirch to reduce its use of fresh water and has created a potential revenue stream for Dawson Creek.

REDUCING RAIL LEAKS

Best practices shared with the front line

When it comes to eliminating leaks and achieving Spill Zero, Shell Chemicals is taking a close look at its loading, unloading and transportation practices.

At Shell Deer Park alone, one of the largest petrochemical complexes in the U.S., there are over 20 miles of track, with 30 to 50 railcars loaded on an average day. “We have to manage risks at the source,” explains Chris Jackson, rail technical manager.

That’s why members of the Land Logistics team in the Americas are visiting Chemicals Manufacturing sites in the U.S. and Canada. The objective is to share best practices, improve communication and identify new and better technologies that help prevent leaks.

“Successful implementation of the Spill Zero initiative is critical to the long-term viability of our business,” says Jeff Gribnau, manager of logistics operations at Deer Park. “A spill of hazardous material in the public domain damages our reputation, and leaks on arrival to our customers threaten our partnerships. We must get it right every time if we are to maintain our position in the markets we supply.”

The Land Logistics team visited Deer Park and Geismar and plans to visit Scotford soon. Shell’s Spill Zero initiative is designed to improve all modes of product transport, including road transport. In 2015, Chemicals’ efforts in the U.S., Europe and Asia reduced spills by 30%.
STORY IDEAS WELCOME!

AlumniNews magazine is looking for recent story ideas for our Alumni Features section! In this part of the magazine, we highlight alumni who are staying active and making a difference in retirement. If you know of someone who would make a great profile for the magazine, please send us his/her phone number and email address, along with a brief description of the story idea.

To submit story ideas for the U.S., email ShellUSAlumni@shell.com or mail a letter to Shell Oil Company Communications – Heather Pray Russell, P.O. Box 2463, Houston, Texas 77252-2463. To submit story ideas for Canada, email PublicAffairs-Canada@shell.com or mail a letter to Jackie Panera, Shell Canada Limited, 400 4th Avenue S.W., P.O. Box 100 Station M, Calgary, Alberta T2P 2H5, Canada.