# Looking at the Big Picture

For more than a century, oil and gas development in Alberta has scattered across our landscape in what often seemed like a random way, in search of energy resources. Individual wells were drilled, pipelines constructed and development scattered across the province.

The way we historically regulated development followed the same approach: assessing each application in isolation, one at a time as the applications were submitted.

But times have changed.

Development is no longer single wells dotting the countryside. It now includes multi-well pads where several wells are placed within a compact space, and pipelines lined up in corridors all in a scale that is much larger than in the past. Development is of a larger size, scale and complexity. And times have changed for the Alberta Energy Regulator (AER) too. Before the AER was formed in 2013, both the AER and the Government of Alberta had a hand in reviewing and making decisions on applications related to a single energy development project. The regulator would make decisions on a portion of the project's activities, while the government

#### What are cumulative effects?

To us, cumulative effects are the total environmental changes caused by energy development in combination with other past, present and future human actions.

What is the land-use framework? Released in 2008, the Land-use Framework sets out the GoA's approach to address Alberta's growth pressures, and to achieve environmental, economic and social outcomes. One of the key strategies of the framework is the establishment of seven regional plans that, once complete, will integrate provincial policies at the regional level, set out land use objectives, and provide the context for land-use decision making that reflects priorities for each region.

would make decisions on the remaining activities. Now as the province's single energy regulator, we receive applications for all elements of energy development and that means we have to change the way we regulate.

Albertans' expectations have changed too. They want to know more about what's going on in the province, where development will occur, how it will happen and how it affects them. And they want to be part of those discussions and decisions before they're made.

Knowing we need to change, what's our path forward?



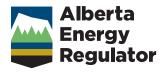
## Area-based regulation

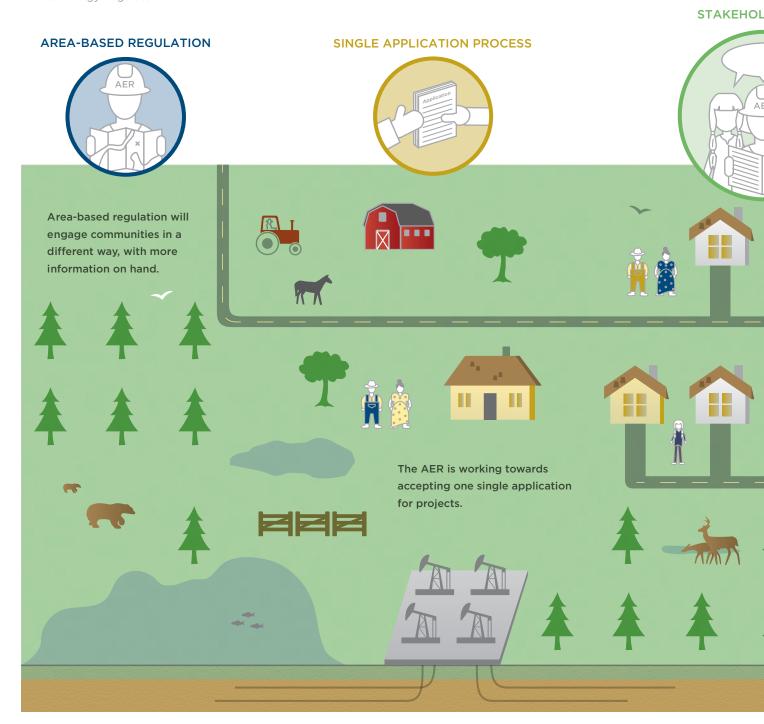
The first way is through the area-based regulation project that we're launching. The project will allow us to look at energy development in a specific area of Alberta-right now and what the potential is for the future. Working with a community, we'll look to solve problems unique to that area, and at a scale that manages cumulative environmental effects.

Sounds daunting; where do we start? Below the earth's surface. We need to understand how the subsurface resources will be developed before we can anticipate what activity will happen on the surface and how development might happen over time.

We'll examine the landscape to see where existing development occurs and assess the current state of the environment.

As the regulator, we must make sure that development meets all Government of Alberta policy requirements and guidelines. This includes important policies like the Landuse Framework, and associated regional and sub-regional plans, and environmental management frameworks. We'll also compare against environmental thresholds or triggers, which provide us a blueprint for land-use management and decision-making. We will determine what the potential is for





further development, economic benefit from the resources, and what existing regulatory controls in the area need to be improved.

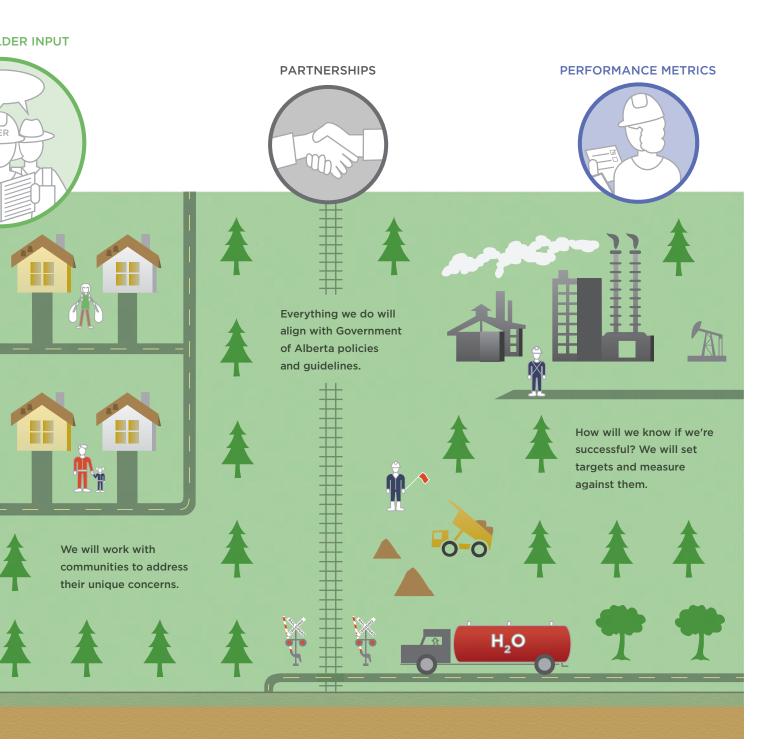


## Stakeholder input

Next, we'll work with residents, non-governmental organizations, indigenous groups and other stakeholders to identify potential development and unique concerns they may have. We'll then collaboratively come up with solutions to their concerns. Based on the input from communities,

operators will know how to address unique and specific concerns before they submit applications to us.

With all of this information, the AER will make more informed decisions that will result in better outcomes for Albertans and the communities surrounding energy development. The first area we're planning to test this concept in is the Fox Creek area where a lot of development has occurred and is expected to continue, and where the community and people in the area have concerns about water use by the energy industry, earthquakes linked to oil and gas development,



and the impacts to social infrastructure in their community. We'll test the approach over the next year, and once we're finished, we will take what we've learned, refine it and apply methods to other areas or issues around the province.

## **Partnerships**

While all of this is happening, we continue to test a cumulative effects blueprint that we developed. This blueprint maps out how we can make decisions about energy development that better consider cumulative effects

on the environment, and how we can more effectively work with our government partners in the Integrated Resource Management System. Cumulative effects management will only happen if we work together with other government agencies that are responsible for setting policy direction and play a role in environmental monitoring, land-use planning play a role in environmental monitoring, land-use planning and aboriginal consultation.

Cumulative effects management needs to be considered at every stage of the regulatory and we need to understand

how much development is occurring and the type of development that is occurring on the landscape relative to the environmental thresholds. Area-based regulation will be one way to test the different stages of our regulatory process so that the process can become more protective, effective, efficient and credible for improved cumulative effects management.



## Single application process

For example, we want to make sure we have all the information available before we decide on an application. Starting with a few projects, we will accept one single application for multiple activities related to a project. This is a significant shift from the way we operate. Currently, we look at applications one at a time, even though many applications are related to the same project. This approach will allow us to better understand the combined cumulative impacts of the multiple activities associated with the application. This enhances environmental management. By accepting applications through a few test cases, we can test this new approach, refine and improve the process before implementing it across the province.



### **Performance metrics**

As we make these changes, we will have further assurances that industry is accountable for their actions and meeting all our requirements. To do this, we're developing performance metrics to help us assess industry's performance relative to cumulative environmental performance, including against thresholds established by government in regional land use plans. The performance metrics will better equip us to make decisions on energy development and give us the scientific data we need to refine our regulatory approach to make sure we are successfully managing cumulative effects.

Is it a lot to tackle? Yes. Can we do it overnight? No. But we're laying the foundation to make big shifts in the way we regulate and protect public safety and the environment.

The Alberta Energy Regulator ensures the safe, efficient, orderly, and environmentally responsible development of hydrocarbon resources over their entire life cycle. This includes allocating and conserving water resources, managing public lands, and protecting the environment while providing economic benefits for all Albertans.

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