Opening session: Mining, extractive industries and regional development in a global context – enhancing quality of life (9.00 – 9.45)

This session will engage with two key ideas:
- how mining can be a driver of improved regional well-being; and,
- be environmentally sustainable for current and future generations.

Delivering improved well-being for mining regions

Well-being encompasses a range of material (income, housing) and non-material (subjective well-being, social networks) factors. Although mining regions are important growth drivers for many countries, the benefits of this specialisation can often flow outside of producing regions, and have uneven impacts within them. These dynamics contribute to income inequality, issues with the affordability of housing, and rising labour costs that impact on other sectors. Mining also often occurs in rural areas that face demographic challenges, and a key mechanism to retaining benefits is by developing, attracting and retaining a skilled workforce. When these issues are not effectively managed, and local communities perceive mining is not delivering long-term benefits – it undermine support for mining and extractive activities, and can result in long-term structural adjustment costs when resources are depleted.

Environmental sustainability

Mining and extractive activities generate local environmental impacts and externalities. This includes impacts on local air and water quality, noise and air pollution, and competition between different sectors for the use of water and land. Again, without careful management, these localised impacts can have significant negative impacts on local ecosystems and “social license to operate”. Mining and extractive industries are also critical for the transition to a low-carbon economy with minerals and metals such as copper and cobalt essential to the development renewable energy technologies. Regions specialised in hydrocarbons will face the challenge of transition and diversification, and governments will have to manage the distributional consequences of this shift. Either way, mining regions will have a key role to play in the transition to a low-carbon economy.

Speakers will address the following points:

- Global mega-trends (digitalisation, climate change, population ageing and migration, globalisation) and the future well-being of mining regions and cities
- Main opportunities that flow from a specialisation in mining and extractive industries, and how can producing regions better capture them to improve the well-being of local communities
- Leading practices to develop, attract and retain a skilled workforce and make growth more inclusive
- Opportunities and risks associated with the shift to a low-carbon economy for mining regions and cities
- Role of industry, governments, universities and other stakeholders in support successful transitions
Panel: OECD Project on Mining Regions and Cities (9.45 – 10.15)

Moderator: TBC

There will be a 30 minute facilitated discussion where panellists will be asked to give their reflections and insights on enhancing quality of life for mining regions and cities, and the role of the OECD in facilitating global knowledge-sharing and action on this topic. This will address questions such as:

1. What are the future trends, opportunities and challenges related to quality of life and wellbeing in your region?
2. What are your current priorities for improving quality of life and wellbeing?
3. What good practices have been implemented to improve quality of life, attract and retain new migrants, and make growth more inclusive?
4. What are some good practices of industry and government collaboration to address local environmental issues?
5. How can industry, government and non-government organisations work together more effectively to improve quality of life in mining regions and cities?
Regions with mining and extractive industries: Opportunities from the sustainable energy transition and contributing to SDG 13 - Climate Action. (11.30 – 13.00)

Speakers will give a 10 minute presentation to address issues within the following scope.

Goal 13 of the Sustainable Development Goals calls on countries to combat climate change and develop scalable solutions for cleaner, more resilient economies. To strengthen the global response the Paris Agreement (2015) commits governments to keep the increase in global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit it to 1.5°C. The sustainable energy transition is part of the response and refers to the changing mix of energy production from the use of non-renewable resources (coal, oil and gas) toward renewables (hydro, wind, solar, tidal, and geothermal) to achieve this goal. This shift has a number of implications for regions with a specialisation in mining and extractive industries. On the upside, there are a number of key opportunities:

- Local universities and firms supporting the development of technologies that can increase resource efficiency in mining operations and the value chain
- Opportunities flowing from investment in, and maintenance, of renewable energies and localised energy production
- Potential to use decommissioned mine sites for renewable energy production
- Potential for new and expanded mining associated with a growing market for certain metals (e.g. cobalt, copper, lithium, nickel, and zinc)

On the downside, regions that are specialised in the extraction of hydrocarbons (coal, oil and gas) are likely to face adjustment costs. The pace of this adjustment will be different between countries depending upon policy responses, technological innovation, and prevailing market conditions. This shift has particular implications for regions specialised in energy production from coal/lignite. Importantly, the adjustment costs will be distributed unevenly, including across national territories. There has been increasing interest globally in the concept of a “Just Transition” which ensures local communities affected by these adjustments can secure their future livelihoods and prosperity.

Effective place-based regional development policies will be key to ensuring regions can benefit from this shift and manage the adjustment costs. This is because the impacts and opportunities will be highly differentiated (place-specific) and addressing them will require co-ordination between multiple actors (local communities, industry, levels of government, universities etc.). Some of the key features of this policy response will include:

- National policy framework that enables regions and cities to develop regional development plans and set priorities for future investment
- Policy focus on building competitive advantages and facilitating diversification (e.g. smart specialisation)
- Industry and governments engaging with communities to manage expectations and provide information about socio-economic and environmental impacts
- Good quality local area data and analysis (on climate risks, land use and resources, business demography, labour markets, health and education etc.) that can support informed decision-making
- Availability of scenario and forecasting tools to understand future impacts and opportunities associated with climatic conditions, energy transitions, demographic trends, and demand for skills
- Development of local institutions to coordinate planning and action amongst stakeholders
Incentives and mechanisms to facilitate co-investment between levels of government, and with the private sector

OPTIONAL LUNCH SESSIONS (two options) (13:00-14:00)

A) Regional development strategies for a just transition

“A just transition ensures environmental sustainability as well as decent work, social inclusion and poverty eradication” International Labour Organisation (2015).

This lunchtime dialogue will provide an opportunity for participants to have an in-depth discussion about leading practices regarding place-based strategies to support the transition to a low-carbon economy. Ensuring a just transition is particularly challenging for some regions that are specialised in mining and extractive industries and other carbon intensive activities. Coal producing regions are particularly vulnerable. In these regions, workers and local communities depend on these industries for their livelihoods. Many hydrocarbon producing regions are rural and face additional challenges in adapting to climate change due to higher transport costs, lack of public transport, limited economic diversity, and ageing and loss of populations. This can impact on the capacity of local actors, particularly municipalities, to offset transition impacts. Partnerships between levels of government, industry and local communities to support transition efforts are needed. Responses to climate change will need to be sensitive to these spatial differences. Regional development policies will also need to mainstream climate change mitigation and adaptation measures. Long-term place-based strategies will be needed to develop new economic opportunities for mining regions in the context of the shift to a low-carbon economy.

B) Mainstreaming biodiversity and mining

This lunchtime dialogue will provide an opportunity for stakeholders to learn about the work of the Conservation of Arctic Flora and Fauna (CAFF) working group of the Arctic Council on mainstreaming biodiversity objectives. CAFF provides a mechanism to develop common responses on issues of importance for the Arctic ecosystem such as development and economic pressures, conservation opportunities and political commitments. The CAFF oversaw the release of the Arctic Biodiversity Assessment 2013: Status and Trends in Arctic Biodiversity. One of the six cross-cutting themes of the Arctic Biodiversity Assessment (ABA) focused on the importance of mainstreaming biodiversity objectives by building partnerships with a wide range of stakeholders to seek innovative solutions and expand the responsibility for taking care of biodiversity. This included engagement with the mining and extractives industry in the Arctic. The lunch will provide an opportunity to learn about leading practices from this work, and engage in further dialogue with national, sub-national, industry and Indigenous representatives.
Parallel policy workshops (14.15 – 15.30)

Local opportunities from environmental management: Biodiversity, rehabilitation and delivering on SDG 15: Life and Land

Scope

This session will focus on how local communities can participate in measures to manage the impacts of mining operations on local habitats and flora and fauna. This includes through local governance and collaborating with industry, data collection and monitoring, and the creation of local jobs and business opportunities. This way communities and companies can contribute to SGD 15: Life and Land, through preservation of eco-system services, offsetting impacts and participation in landscape level planning.

Key issues to address

- Local conservation strategies and planning frameworks
- Leading practices in community based monitoring
- Availability of local area data and development of indicators
- Working with Indigenous communities
- Mining closure and rehabilitation efforts
- Role of sub-national authorities in climate change adaptation and mitigation
- Local entrepreneurship and job creation linked to environmental management

Format

2-3 presentations of 8 minutes followed by facilitated discussion with a panel.

Local and Regional Smart Specialisation Strategies: Greening resource-based development

Scope

Smart specialisation is a place-based approach to innovation policy used in the European Union (EU). It is characterised by regions identifying areas of absolute and competitive advantage, facilitating connections between sectors and stakeholders to promote innovation, and supporting a process of entrepreneurial discovery to support new areas of economic activity. This has particular implications in a mining context. For example, how to facilitate linkages between large multi-nationals and local firms, and manage the impacts of a resource specialisation on other tradeable sectors. Smart specialisation can support regions in decoupling economic growth from resource use and environmental degradation. This includes through the development and deployment of environmental technologies, renewable energy, and leveraging opportunities in the bio-economy and eco-system services.

Key issues to address

- Transition to a low-carbon economy – risks and opportunities for regions
- Local approaches to environmental innovations
- Scope for local procurement in the mining value-chain
- Developing local business eco-systems and mining clusters
- Strategies to promote diversification and non-mining economic activities
- Role of local universities in regional innovation and smart specialisation strategies
- Transition efforts in coal regions

Format

2-3 presentations of 8 minutes followed by facilitated discussion with a panel.

Learning from Indigenous Peoples: Perspectives on resource-based development

Scope

This session will build upon our first and second events that included the opportunity for Indigenous-led dialogue about mining and resources industries and how it can link to Indigenous community development and well-being. Across Arctic countries mining and resources extraction occurs on lands and waters that are owned, occupied and/or used by Indigenous peoples. As such, the relationship between the mining and extractive industries and Indigenous peoples is a critical one.

Key issues to address

- Implementation of the principle of Free, Prior and Informed Consent
- Scope to balance cultural and spiritual value of land and traditional livelihoods with mining and extractive activities
- Culturally appropriate engagement, lessons and good practices
- Making the most of impact and benefit sharing agreements
- Priorities for policy change regarding relations between Indigenous peoples and the mining industry
- Contributing to SDG 10: Reducing Inequalities, though inclusive approaches in working with communities

Format

TBC in consultation with Indigenous peoples representatives

SDG 12 – Responsible Consumption and Production: Regional development and the circular economy in resource extraction

Scope

In order to meet SDG 12, there is increasing focus on how to reduce waste and pollution from industrial systems. The circular economy is used a way to describe systems and actions that aims to decouple industrial growth from natural resource consumption. In the mining and metals value chain this means a focus on resource efficiency, recycling, refurbishing products, substituting metals for other materials, and recovery and
re-use of waste products. Regions need to be proactive at identifying how local business can participate in this transformation.

Key issues to address

- Emerging technologies and business activity linked to the circular economy (recycling, waste products, maintenance)
- Circular economy opportunities for rural regions in the mining and metals value chain
- Urban mining initiatives
- Skill implications of the circular economy
- Leveraging linkages with other sectors to promote the circular economy (agriculture, fisheries and aquaculture, and forestry)
- Renewable energy and mining operations in remote contexts
- Role of sub-national authorities in promoting the circular economy

Format

2-3 presentations of 8 minutes followed by facilitated discussion with a panel.

Moderators report back from the parallel policy workshops (16.00 – 16.30)

Moderator or nominated representative gives 5-minute report back on key points with some opportunity for Q&A.

Arctic stakeholder dialogue: Responsible mining and regional development (16.30 – 17.30)

Speakers will participate in panel that will address questions and issues within the following scope.

The Arctic includes part or all of the territories of eight nations: Norway, Sweden, Finland, the Kingdom of Denmark, Iceland, Canada, Russia and the United States. The Arctic is rich in metals such as copper, gold, and nickel, and has significant potential resources of oil and gas. Climate change is likely to open up new development opportunities and shipping routes that will reduce the costs of moving goods from Asia to Europe. The Arctic is also a unique and vulnerable environment with significant biodiversity value and it plays an important role in regulating the world’s climate. It is home to approximately 4 million people that live in cities and sparsely populated areas - including a range of distinct Indigenous groups who combine traditional and modern life.

Responsible development of the Arctic’s mineral and energy resources and regional development encompasses issues such as:

- The role of sub-national authorities in long-term planning and international co-operation related to resource extraction and conservation in the Arctic
- Inclusion of local communities in environmental licensing procedures (and operationalising the principle of free, prior and informed consent)
- Embedding sustainable development principles in mining operations
- Integrating mining and resource operations with local and regional development
- Benefit-sharing arrangements with Indigenous communities
- Co-investment and leveraging infrastructure investment for community benefit
- Local community involvement in mining closure and rehabilitation efforts

The session will also include opportunities for the audience to identify how experiences in the Arctic can also help understand how to address these issues in other parts of the world such as Latin America and Australia (and vice versa).
Thursday 13th June

9.00 – 10.30 Panel Discussion: Increasing the attractiveness of mining regions and cities by linking different measures that enhance liveability

Scope:

This session will discuss strategies and mechanisms mining regions and cities develop to become more attractive and deliver higher quality of life. Attractiveness can be broadly defined as the factors that people generally value about their local neighbourhood, town or city, such as accessible and reliable public transport, high-quality open space, and good schools. These factors are generally immobile or place-based, thus important to regional growth and competitiveness. The OECD regional wellbeing framework captures many of these elements and covers 11 dimensions: income, jobs, housing, health, access to services, environment, education, safety, civic engagement and governance, community, and life satisfaction. Comparative analysis by the OECD across these dimensions shows that mining regions face particular challenges in social dimensions including education, health, and community. Enhancing city and regional attractiveness requires an integrated approach to improving services, local infrastructure and amenities, housing choices, and opportunities for social participation.

Each participant will have 8 minutes to present their work/project. Following, there will be a 45 minute facilitated discussion where panellists will be asked to give their reflections and insights on enhancing quality of life for mining regions and cities.

The following questions will be addressed:

1. What incentives and mechanisms do you use to attract people to your region/city? What has worked and what does not work?
2. How do you balance and co-ordinate between different dimensions that contribute to quality of life and attractiveness? Do you measure it?
3. What are some good practices of collaboration to address attractiveness issues that affect quality-of-life?
4. How can industry, national and sub-national government as well as non-government organisations work together more effectively to improve liveability in mining regions and cities?
Universities – platforms for regional innovation and human capital development

Scope

In knowledge-based economies, universities play many important roles, including providing platforms for regional innovation, building new economic development pathways and supplying skills for the local economy. These roles can be particularly important in rural and remote regions with a specialisation in mining and extractive industries. For example, in terms of supporting diversification efforts and responding to risks and opportunities associated with automation and digitalisation. These regions can also lack other institutional actors that coordinate strategic planning, research, and innovation activities. Universities can play important roles in producing research and disseminating information so local communities can make more informed decisions about development. This session will explore the different leadership roles that universities take in the development of mining regions and cities.

Key issues to address

- The contribution of universities to the competitive advantage of mining regions and cities
- Fostering innovation including in transition to low carbon economy
- Developing human capital linked to regional needs and retaining graduates
- Collaboration with industry on research and development, and skills
- Role of universities in promoting entrepreneurship
- Role of universities in local and regional governance arrangements
- Global and national networks to promote knowledge transfer and research on mining and extractive industries

Format

2-3 presentations of 8 minutes followed by facilitated discussion with a panel.

Culture and creative industries enhancing liveability in mining regions and cities

Scope

Culture and creative industries includes a broad range of activities, including cultural heritage and museums, architecture, music, live performance, publishing, the art and antiques market, music, arts and crafts professions, television and radio, film and video, advertising, design, fashion, video games, and software and IT services. For mining regions and cities, these economic activities are important in two ways. First, they generate social value in terms of opportunities for the inclusion of different population groups such as Indigenous peoples, contribute to social cohesion, and supply leisure activities and recreational spaces. Second, they contribute to economic development through providing jobs and opportunities for entrepreneurship and small business. This can be particularly important for regions that are transitioning out of mining and extractive industries and seek to renew their identity. Despite this, policy makers often do not grasp the full extent of the sector, and do not have coherent strategies to support it. This session will highlight
different ways in which cultural and creative industries are used to increase quality of life in mining regions. Further, it will demonstrate the needs of the sector and assess how policies and programmes can be shaped to address them.

Key issues to address

- Effects of Cultural and Creative industries on “making people stay”, building connection and identity to places and contributing to social cohesion
- Strategies to foster cultural and creative industries in mining regions and cities
- Integration with other sectors such as tourism (cultural heritage) and manufacturing activities (e.g. traditional crafts)
- Mining heritage, bridging environmental and cultural rehabilitation with economic development
- Development of cultural heritage management plans
- Strategies to promote diversification and non-mining economic activities through culture and creative industries

Format

2-3 presentations of 8 minutes followed by facilitated discussion with a panel.

Land use planning and housing in mining regions and cities

Scope

Good quality housing is essential to quality of life and the capacity to attract and retain a skilled workforce. Housing markets in mining towns and cities have a number of characteristics. The investment and growth phase of mining projects generates increased demand for local housing and accommodation. Higher wages for workers in the mining (and related) sector(s) leads to increases in land and housing prices, and rents. Often these projects occur in rural economies where municipalities may not have the capacity to invest in local infrastructure, or undertake strategic and statutory planning processes to facilitate appropriate housing supply. Mining companies may also utilise “fly in-fly out” labour models, temporary accommodation, and the construction of mining camps. On the downside, mining towns may be left with old and poor quality housing stock with low occupancy rates.

Key issues to address

- Responding to pressures on the housing market
- Access to finance for housing and accommodation
- Social housing and the role of government in housing provision
- Dealing with redundant housing stock
- Ensuring affordability for the local community and sensitivity to local wage disparities in connection with aiming for Sustainable Development Goal 10: Reduced Inequalities
- Cooperation with companies to address accommodation problems, and opportunities for public-private partnerships
- Strategic and statutory land use planning in a mining context
Providing health and education in remote places – innovations to ensure wellbeing

Scope

This session will discuss how institutional and technological innovations to provide public services in rural and remote areas. High quality, accessible public services are key to retaining and attracting long-term residents, supporting diversification efforts, and fostering community life in mining regions and cities. The provision of public services in small towns and remote areas can be a challenge due to high costs and difficulties in attracting and retaining skilled professionals. ICT and broadband capacity may be inadequate to support the remote provisioning of some public services. In many cases, mining companies also play a key role in subsidising public service provision, which can lead to the blurring of roles, but also provides local municipalities with the option for partnership and testing innovative solutions. It also becomes a critical issue when resources are depleted and mining operations cease.

Key issues to address

- Importance of health and education for quality of life and rural development
- Availability of broadband in rural areas
- Emerging digital technologies and e-services
- Co-operation between industry, government and non-government organisations to provide healthcare and education to increase quality of life
- Attracting and retaining skilled professionals in rural and remote areas
- Public and municipal services in the context of mining transition and closure

Format

2-3 presentations of 8 minutes followed by facilitated discussion with a panel.

Moderators report back from the parallel policy workshops (12:00-12:30)

Moderator or nominated representative gives 5 minute report back on key points with some opportunity for Q&A.
Building skills for the future – responding to digitalisation and automation (14.15 – 15.30)

**Scope:**

Sustainable Development Goal 8: Decent work and economic growth, requires societies to create the conditions that allow people to have quality jobs that stimulate the economy. Digitalisation and automation will change the workforce and demand for skills in mining regions and cities. While new production possibilities in the extractive industries sector will make mining safer and more efficient it will also result in the replacement of tasks that have traditionally been carried out manually or with human-controlled machinery. These innovations include connected mobility, and virtual and augmented reality to empower remote workers and machinery in real time, and deploying digitally enabled hardware tools to perform or improve activities. As a result, the World Economic Forum predicts a potential loss of about 330,000 jobs, or nearly 5% of the global mining workforce over the next decade, including a shift of operations to large urban centers. This particularly affects lower skilled entry jobs in extractive operations as well as the local procurement of goods and services. At the same time, it increases the demand for labor with specialized skill sets. To manage this transformation mining regions and cities will have to identify how to secure jobs and build a skilled workforce needed to meet these challenges and opportunities.

Each participant will have 8 minutes to present their work/ project. Following, there will be a 30 minute facilitated discussion where panellists will be asked to give their reflections and insights on how to build skills for the future and responding to digitalisation and automation.

The following questions will be addressed:

1. What impacts are increasing digitalisation and automation likely to have on mining operations and the value chain? What will be the geographic implications of this shift (between cities and rural areas)?
2. What kinds of mining jobs will be available in remote rural areas in the future, and how can local people benefit from them?
3. How do you build skills and education future workforce? What is the role of local universities and other education institutions?
4. How can governments and educational institutions effectively co-ordinate with industry to supply the right skills for the future?
5. What can national governments do to assist rural and remote regions in addressing the challenges arising from this transition?

**OECD Mining Regions and Cities: Summary and next steps (16:00 – 17:00)**

This session will summarise the outcome of the two conference days and like it to the discussions of the pre-conference and the overall project. It includes final words of the conference host and allows the next host to announce the timing and special focus of the 2020 event.