

# MASTER THESIS

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## Oil and gas development and employment in Arctic communities: the case of Alberta and Finnmark

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## **Abstract**

At the present time, the Arctic can be perceived in two ways. According to the “frontier emphasis”, Arctic is a vast geographic area with the great energy potential which demands specific serving staff. Nonetheless, according to the “homeland emphasis”, Arctic is an area of cultural pluralism, a homeland for various local and indigenous communities, that requires a source of financial support, employment, and socioeconomic development (Kassam 2001). Accordingly, this thesis attempts to link these two perspectives and describes the position of the local Arctic community towards employment in gas and oil industry on the examples (cases) of remote Arctic areas in Norway (Finnmark) and Canada (Alberta).

This study starts from presenting social and economic tendencies of the Circumpolar region and the main theories concerning labor market analysis and indigenous employment. Also, it provides an overview of the legal regulation of indigenous people’s right on national and international levels. It sheds the light into the demanded competencies of local and indigenous employees in gas and oil industry in remote Arctic areas today. The special attention was paid to the justifying the use of case study approach and document analysis method. The main part of this research presents Canadian and Norwegian cases independently and analyzes main characteristics of the local and indigenous population as a research subject, constructs the economic and industrial portrait of the research field as background for the process of employment.

As a result, this thesis discovered that the matching mechanism of meeting the needs of local employee and employer of Alberta and Finnmark is arranged in a similar way. In both regional labor markets, local non-indigenous employees are highly relevant for the gas and oil industry and these companies and community collaborates. In Norway, such relevance is higher due to higher general standards of life than in Canada. Considering the relevance of the indigenous local communities towards the gas and oil labor market, the situation is more complicated. In Alberta despite the legally documented special treatment to the indigenous labor force, the negative impact of the development of the oil and gas industry on the viability of the indigenous communities is very significant. Therefore, local indigenous Alberta’s communities and gas and oil industry are not relevant for each other, therefore, labor collaboration is not possible. In Finnmark, there are no significant barriers that prevent Sami people from the employment in gas and oil industry. At this instant, local indigenous Finnmark’s employee is highly relevant for the gas and oil industry and these companies and communities collaborate.

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Finally, I would like to express the biggest gratitude to my family and friends who inspired me to have faith, work harder and never give up.

For me, this thesis became an exciting challenge that taught me a lesson to stand tall and show the world what you are made of. When the world beats you down, find a reason to get back up again. Every time you fail, you come one step closer to success.

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## **Chapter 1. Introduction**

The Circumpolar region is an area, which attracts the attention of the media, academics and various industries. It is perceived as a natural laboratory, military zone, mineral deposit, energy province and so on. The perception of the Arctic as an energy province is one of the most topical discussion nowadays. In the modern world, non-renewable natural resources as coal, oil, and gas are the most demanded energy sources. According to United States Geological Survey, “Arctic could contain as much as 25 percent of the world's undiscovered recoverable oil and gas resources” (Klett, et al. 2015). These areas attract the attention of global corporations and governments of different countries that implement their projects here, including the construction of pipelines, hydroelectric power plants, and mines for the extraction of gold and other natural resources. Despite the geographical remoteness, limited infrastructure, and harsh climate conditions, relatively high oil prices and global energy demand made this area desirable for the petroleum industry. Nowadays about a tenth of the world's oil and a quarter of its gas are produced in the Arctic. This activity provides the companies and countries with value creation, income, and employment. The growth of the Arctic gas and oil industry opens up broad opportunities not only for companies but for regional development. In brief, regional development is a sum of measures aimed at reducing regional disparities. Such measures are mostly related to the infrastructure development and attracting investment (EYGM 2013). Correspondingly, the availability of the natural resources brings to these areas prosperity and sustainability. The potential social impact of the development of petroleum industry is diverse. For one thing, it leads to the stimulation of innovations and the growth of the knowledge industry, which will provide the business with the necessary personnel and human capital in general. Another key point is the construction of the new regional industrial policy and improvement of the complimentary industries. For the most part, gas and oil in the Arctic lead to the growth of the local employment and value creation (Henderson and Loe 2014).

In addition to that, Arctic is not only a prospective zone for natural resource development but also a place of residence for various local communities. Petroleum industry develops side by side with the local community, they share and exploit the same territories and resources. Arctic communities are the sum of people with various ethnicity, nationality, cultural traditions and way of living (Aarsæther et al. 2004). Such tendency can be explained by two factors. To begin with, Arctic partly “belongs” to such countries as United States, Canada, Finland, Greenland (Denmark), Iceland, Norway, Russia, and Sweden. This is a home for approximately 4 000 000

of people, that lives and work there (Csonka and Schweitzer 2004). Furthermore, 10 percent of the local population is represented by more than 40 ethnic groups (Csonka and Schweitzer 2004). “Indigenous peoples are the holders of unique languages, knowledge systems, and beliefs and possess invaluable knowledge of practices for the sustainable management of natural resources. They have a special relation to and use of their traditional land. Their ancestral land has a fundamental importance for their collective physical and cultural survival as peoples” (Chakrabarti 2012, p.16). Indigenous peoples are the cohort with the most intensive tempo of growth in the Circumpolar region. The average age of indigenous people is lower comparing with non-indigenous. Another significant feature of this population group is a high level of adaptability to harsh climate conditions.

Nevertheless, this social group is poorly presented in the labor market. This phenomenon can be explained by such reasons as a low level of education, the absence of required competence and work experience, lack of opportunities for self-realization, lack of adaptation to the needs of the market economy, etc. Moreover, the majority of the indigenous population is concentrated in the remote rural Northern territories. The tendency of the incomplete school education among the indigenous population is twice bigger than among the non-indigenous population. The language barrier, cultural differences, and racism exacerbate the situation. All of these factors make indigenous people a vulnerable group in the labor market and put them under the risk of unemployment, marginalization and social deprivation (Aarsæther et al. 2004).

In essence, all of the representatives of the local Arctic community face such similar issues and challenges, as urbanization, rapid transition from the pre-industrial traditional economy to the global market economy, lack of social and food security, competition over declining natural resources, devolution of the authority, etc. (Aarsæther et al. 2004)

As can be seen, the Arctic can be perceived in two ways. According to the “frontier emphasis”, Arctic is a vast geographic area with the great energy potential which demands specific serving staff. Nevertheless, according to the “homeland emphasis”, Arctic is an area of cultural pluralism, a homeland for various local and indigenous communities, that requires a source of financial support, employment, and socioeconomic development (Kassam 2001). Accordingly, this thesis attempts to link these two perspectives and investigate employment environment for local (indigenous and non-indigenous) communities in the oil and gas industry of remote territories in the Arctic.

At the present time, the Circumpolar labor market experiences new challenges. Despite the fluctuations in world energy prices, resource production will continue to be a driving force of the Arctic economy. Labor market expands and demands well-skilled young workers (Huskey et al. 2014). At the same time, the overall Arctic demography will experience the transition from a natural increase in the negative population growth. Exceptions to this are Arctic indigenous population and local (indigenous and non-indigenous) population of the Northern areas of USA (Alaska), Canada, Iceland, and Norway, where the population growth is projected (Heleniak & Bogoyavlensky 2014). Such tendency is explained by the younger age structures, higher fertility rates, lower infant mortality and longer life expectancy of the local population of the specific areas of the Circumpolar North.

As can be seen, keeping the balance between “homeland” and “frontier” approaches to the perception of the Arctic is a difficult task. On the one hand, the local population faces the variety of socio-economic issues today. Meeting the needs of the people who live in the Arctic zone is the primary challenge. Creation of the new enterprises, new jobs, new additional sources of income and improvement of the socio-economic base is urgent (Heleniak & Bogoyavlensky 2014). On the other hand, Arctic territories have developed gas and oil industry, great potential for the regional development and specifically for the improvement and expanding the local labor market. Another key point is that in theory the needs of the industrial sector and the potential of the local population correspond to each other (Young and Einarsson 2004).

As an illustration, one of the requirements to the gas and oil industry worker in the Arctic is a willingness to adapt to specific climate conditions and the residence in isolated remote areas. Local inhabitants of these territories are acclimatized to polar nights and want to remain near communities. Moreover, indigenous people of the Circumpolar region as a population group are characterized by the working age and unique traditional knowledge about living the Arctic way.

All in all, the above statements work in theory. In order to observe the way things are, this master thesis puts forward **a goal** to observe the position of the local Arctic community towards employment in the gas and oil industry based on the examples (cases) of remote Arctic areas in Norway (Finnmark) and in Canada (Alberta).

### **Research questions:**

- To which extent is the oil and gas industry relevant for local and indigenous employment in Alberta and Finnmark?
- Which factors have the largest influence on the matching of the employment needs of local Arctic community (indigenous and non-indigenous) and gas and oil industry?
- Which strategies facilitate the coordination between local Arctic communities (indigenous and non-indigenous) and gas and oil industry.

In this research project, the process of *labor market matching* will be central. In other words, in my master thesis, I would like to explore the coordination mechanism between the potential employees among the local Arctic communities and the indigenous peoples and gas and oil employers of the Circumpolar region.

Considering the limits of the master thesis, it can be quite difficult to study the complete Circumpolar region, so within my master thesis' project I will focus on observation of labor market in gas and oil industry of two concrete remote regions of Canada and Norway – Alberta and Finnmark. This choice is determined by greater access to data.

As shown above, studies related to the investigation of the issues and challenges that take place in the Circumpolar region are highly relevant today. My research will be carried out in an interdisciplinary manner. Applying sociological, management and anthropological paradigms I will conduct multidisciplinary research. Discovering the issue of collaboration between local and indigenous employee and gas and oil industry's employer, I will investigate this issue from the economic management position of oil and gas companies and from the point of view of indigenous peoples, beware of colonialism.

The preliminary analysis allows to conclude that many studies explore the confrontation between indigenous peoples and various industrial sectors, but not their cooperation. This project will fill this gap and will explore features of the local labor market (including indigenous), details of hiring local workers in gas and oil industry in Canada and Norway. Within this project, I will draw a perspective of sustainable collaboration between local labor force and gas and oil employers. Also, it will help to understand how cultural characteristics of indigenous peoples can influence on the process of staff recruiting. This is the theoretical perspective of this paper. As a matter of the practical importance, results of this research will assist to develop personal selection among the local and indigenous peoples in Arctic

conditions. Also, the results can be useful in the creation of state programs on employment and labor market development of the Arctic.

In like manner, according to chosen research field, I will focus on qualitative methods. In Norway and Canada, data collection will be carried through the analysis of documents, provided by the stakeholders of gas and oil companies, representatives of local and indigenous communities and outsourcing agencies. Also, the activities of the local and state employment services will be taken into account. Special attention will be paid to the analysis of secondary data. Norway and Canada have high developed systems of state statistics, which has a lot of useful, already collected and analyzed data. Document analysis will help to fill the gaps in knowledge and create the necessary framework for the development of research tools and theoretical foundations of this project. In addition, I will obtain secondary data analysis provided by previous investigations in related scientific fields. Due to the fact, that research field took place in different countries with different sociocultural characteristics, the case study will be flexible, maneuverable and “easy to fit” technique. This approach will assist to get real information and data obtained during real work experience. Also, it will help to understand the strategies and tools using in concrete companies.

This study is organized into six chapters. In this first chapter, the topic is introduced. Apart from presenting social and economic tendencies of the Circumpolar region, it also introduces the research questions and the goal of the study. The second chapter of this master thesis is “theoretical framework”, which presents the main theories concerning labor market analysis and indigenous employment. Also, it provides an overview of the legal regulation of indigenous people’s right on national and international levels. It sheds the light into the demanded competencies of local and indigenous employees in gas and oil industry in remote Arctic areas today. Also, it will help to construct the background of the observed phenomenon. Chapter three deals with the methodology and describes chosen methods and main aspects of research ethics. Chapters four and five present Canadian and Norwegian cases independently. It helps to analyze main characteristics of the local and indigenous population as a research subject, construct the economic and industrial portrait of the research field as background for the process of employment. This approach allows to answer the research questions within each of the cases and prepare sufficient base for the final comparison and generalization. The final chapter “conclusion” provides the overall comparison of the two cases and answers to the all of the research questions. Finally, it emphasizes the practical and theoretical importance of this master thesis.

## **Chapter 2. Theoretical framework**

The main goal of this chapter is to describe the basic concepts concerning the employment of local community. Firstly, I will describe main theories of employment necessary for labor market analysis. Secondly, moving from the general to the particular, I will focus on the basic fundamental aspects of indigenous employment. I will analyze how indigenous people can be presented as a potential workforce. Moreover, I will analyze the international and national practices of this phenomenon. Thirdly I will have a look at the regulatory basis of such process. I will speak about legal regulation of relationships of indigenous people and labor market on different levels. Within the theoretical chapter, I will clarify and comment main terms and definitions necessary for further consideration.

### **2.1 Employment theories**

Employment theories and recruitments strategies is an extensive branch of knowledge which uses in business, marketing, industrial scope, governmental programs, international laws, etc. Due to this variety of practical applications, these phenomena became topical in the academic community. Special meanings are invested in these concepts by different sciences, forming the research areas, schools, etc. (Brenner and Brenner-Golomb 1996).

Sociology of work and employment explores the employment as a social process. It pays special attention to the social factors that have an impact on the labor efficiency, technological and social conditions in relation to work. Industrial and organizational psychology investigate a human as the subject of the work process. It focuses on the psychological patterns of formation of specific forms of work and man's relationship to it. As a part of social psychology, it explores theoretical aspects of labor, for example, mental processes as employment regulators, and practical aspects of development and optimization of professional selection procedures (Singh 2012). Political science studies the role of labor in the modernization of the economy, the constitution of the special role of work in public relations, the impact of labor and social stratification of society into the political processes at the local and global levels. The object of study of economic anthropology is *Homo Faber* (direct translation from the Latin is the man who creates). This science studies labor as the primary and principal form of human activity. Labor economics discovers the process of reproduction of labor force and cooperation of employees, agents, and objects of labor. It analysis the labor market, labor force and employment (Kar and Datta 2015,).

Since one of the objectives of the current study is interdisciplinarity, I will operate with the general definition of the employment process. Employment is a particular kind of relations between two parties based on an agreement. One side is an employer, he can be presented by organization, corporation, etc. Usually, its main aim is receiving a profit. Another side is an employee. An employee is a person that performs certain functions for the benefit of the employer, for receiving an income. These two sides of employment are the main actors of the labor market (Federal Ministry for Economic Cooperation and Development of Germany 2014).

Consideration of the specific employment theories will create sufficient theoretical base for the following paper. As it was mentioned above, there are several disciplines devoted to the observation of employment theories. Applying all of the theories offered by the different scientific disciplines is beyond the scope of any work, but how to choose the appropriate ones? I will use the middle-range theory, developed by the American sociologist Robert Merton. The main idea of this method is a creation of the verifiable generalizations that links theory with practice. In other words, I will use specific theories to construct a generalized logical system, which will be built in accordance with the empirical research. Such theories will assist to construct broader theory and generalizations (Boudon 1991).

There are several employment theories that throw some light on the various aspects of relationships between employee and employer. In this paper, their consideration will be based on the categories of “Employment and labor market analysis tool” developed by the Federal Ministry for Economic Cooperation and Development of Germany. This tool consists of three elements: labor supply, labor demand and matching process (Federal Ministry for Economic Cooperation and Development of Germany 2014).

### **2.1.1 Labor Supply**

The concept of labor supply focuses on a specific group of potential workers on a particular labor market. Labor supply is the potential workforce, that available, able and willing to work within the particular labor market. The labor force is a more general and broad concept. Labor force can include employed and unemployed people, the staff of the concrete company, sphere or geographical area (Federal Ministry for Economic Cooperation and Development of Germany 2014).

In 1900 Donald Super developed a “Self-concept Theory of Career Development”. It emphasizes the role of external social factors in the process of forming specific features of the

labor force. According to him, within the different stages of socialization, under the influence of agents of socialization and social institutes, the person gains specific features, interests, and preferences that guide him in the choice of work. Self-concept is a dynamic category and continuing to shape the whole life (Betz 1994). “Super proposed a life stage developmental framework with the following stages: growth, exploration, establishment, maintenance (or management), and disengagement” (Leung 2008, p.120). On the stage growth, within first 14 years of life, there is a formation of worldview, attitude towards society in general and work in particular. The stage exploration continues until 24 years. It is characterized by skills development, the emergence of a hobby, etc. On the establishment phase (until 44 years) person starts the career and stabilize the work experience. Within maintenance phase, the worker provides a stable career growth. Finally, from the age of 65, there is a decline of career and preparation for the retirement (Betz 1994).

It should be mentioned, that within all of these stages the employer plays a significant role. It is possible to say, that some of the features of the labor force in general and labor supply, in particular, is a result of “employers’ behavior” on the labor market and influence of social environment. Labor supply is directly connected with the phenomenon of labor demand (Federal Ministry for Economic Cooperation and Development of Germany 2014).

### **2.1.2 Labor demand**

Labor demand is a sum of actions which the employer is willing to take for hiring a certain amount of workers. In other words, it is an employer’s need for employees. Labor demand depends on such external factors as the general economic situation, the level of labor productivity, the price of labor, legislation, etc. (Federal Ministry for Economic Cooperation and Development of Germany 2014).

There are two concepts of labor demand. In the narrow sense, this concept involves only vacant positions on the labor market. It is mostly used in employment regulation measures. In a broad sense, labor demand covers all workplaces: vacant and occupied (Oreopoulos 2004).

Another classification divides labor demand into individual and aggregate. Individual labor demand is a demand of particular organization of labor in a particular area. The aggregate labor demand includes the total number of employees in different areas necessary for filling the vacant vacancies. According to the Hicks–Marshall laws of derived demand, labor demand depends on such factors as total costs of production, the supply of other factors of production and price of a product (Oreopoulos 2004).

One of the ways of measuring labor demand is Job Openings and Labor Turnover Survey (JOLTS). “JOLTS counts the number of job openings for a selected sample and computes a job opening, or vacancy, rate. It also collects job turnover data from the sample to allow further insight into labor market flows” (Clark 2004).

### **2.1.3 Matching process**

There are several approaches to the defining of the labor market. Chiefly, it is the area, where the matching process takes place. Accordingly, it is a scope of interaction between employee and employer. Labor market's supply and demand depend on such factors as sociodemographic characteristics of the population, migratory flows, level of education and training, social and economic conditions, etc. (Federal Ministry for Economic Cooperation and Development of Germany 2014). The labor market is characterized by a variety of the processes. To demonstrate, let us have a look at some theories that explains the “matching mechanism” on the labor market.

“The Work Adjustment Theory” was developed by Rene Dawis and Lloyd Lofquist in 1960s (Dawis and Lofquist 1964). It was created for the establishment research program framework in vocational psychology. According to “the Work Adjustment Theory”, employment is a bidirectional process. The potential worker is searching for the organization, which environment will meet his requirements. Requirements can vary from psychological needs to physical needs and working conditions and so on. The potential employer is searching for a person who will satisfy the needs of the organization in the form of fulfilling their professional duties. The main criteria of such “matching” is a possession of specific skills and tools by the worker (Dawis and Lofquist 1964). However, the matching process is not static, but a dynamic process. “Four adjustment style variables are identified, which are flexibility, activeness, reactiveness, and perseverance” (Leung 2008, p.116). Flexibility is the employee's tolerance to deviations from the expectations of this “perfect match”. Activeness is connected with the specific actions and willingness aimed at overcoming the obstacles, difficulties, and challenges on the way to this match. Reactiveness and perseverance are employer's way of reaction on the activeness and flexibility of employee (Dawis and Lofquist 1964).

The essence of Work Adjustment Theory is that the employment is the relations of employee and employer where they move towards each other in order to achieve the common goal. The practical meaning of this theory is an assistance of identifying the main strengths and

weaknesses of these relationships and development of concrete measures of mediation (Dawis and Lofquist 1964).

“Theory of Vocational Personalities in Work Environment” is another attempt to explain the matching process between employer and employee. John L. Holland published his theory in 1966 in the journal of the Psychology of Vocational Choice (Holland 1997). According to Holland, on the labor market, there are two actors: employee and employer. Employee as a person possesses a specific professional interest. It is a result, sum of the personality’s features and characteristics. “They could be conceptualized into six typologies, which are Realistic (R), Investigative (I), Artistic (A), Social (S), Enterprising (E), and Conventional (C)” (Leung 2008, p.118). Various combinations of this features create specific employment expectations. People that belongs to a certain type creates a specific environment, for example, artistic environment. Accordingly, the employer may offer a potential employee one of the six types of environment. When the “correct person” meet “correct environment” the matching process occurs. Holland calls it congruence. The higher level of congruence, the higher level of satisfaction and stability on both sides of the employment process. Another concept is differentiation. Simply speaking, if the person possesses a sum of various “interests”, he is a flexible member of the labor market and can easily meet the employer's needs. Differentiation and congruence are the key characteristics of labor supply and have the direct and indirect effect on the “matching” (Nauta 2010).

Holland’s “Theory of Vocational Personalities in Work Environment” can assist the employer to observe career goals and interests of particular strata of the workforce and construct the workforce environment. In other words, its practical function is the evaluation of labor supply (Nauta 2010).

It should be mentioned, that despite the fact that the labor market is a market, it has some specific features, that require a specific scientific approach. It cannot be discovered only through the prism of supply and demand mechanism. Institutional forces have a strong impact on the labor market’s processes. Legislation strictly controls the functioning of the labor market and specifies certain “rules of the game” (Federal Ministry for Economic Cooperation and Development of Germany 2014).

As can be seen, all of the mentioned theories offer the variety of internal and external factors that shapes labor demand, labor supply, and matching process. These factors vary from the

psychological aspects of the employee and the employer to the economic and political characteristics of the external environment. On the one hand, the potential of these theories is large, as can be seen, they make it possible to explain the professional choice of an employee from different positions. On the other hand, in real life, in conditions of market competition, such a detailed diagnosis of the needs of the employee and the employer is not always possible. In fact, the theory explains the ideal state of affairs. In real life, many of these aspects cannot be taken into account in the process of employment.

#### **2.1.4 Labor Market as an arena of matching process**

There are several ways of studying labor market. One of the basic theories is a dual labor market segmentation. The core idea of this approach is that there are two main segments of the labor market: primary and secondary. The primary labor market is characterized by stable employment and higher wages, stable opportunities for career growth, advanced management technologies. The secondary labor market, on the contrary, has unstable employment, low wages, lack of career growth, the absence of professional training, backward management techniques and technologies, the lack of trade unions (Beer and Barringer 1970).

Depending on the research goals, labor market can be segmented into internal and external areas. The internal area of a labor market refers to the environment of one concrete corporation or firm. External area of a labor market is a system of social and labor relations between employers and employees within the specific country, region, sector (Nalbantian et al. 2003). Also, labor market can be segmented by sex or race. Such division makes sense in observation social issues and challenges on the labor market (Reich et al. 1973).

“Theory of human capital” by Gary Becker describes the process of gaining the position on the labor market by the employee. According to Becker, human capital is the sum of knowledge, skills, and education of the worker. The difference in human capital leads to income inequality on the labor market (Becker 1993). Investments in education, training and work experience lead to the growth of income and the reduction of the brain drain (Yuxiao 2011).

Governmental programs and measures aimed at the regulation of the labor market and protection of the vulnerable segments and members called labor market policy. Such policy can have passive or active character. Active labor market policy is a sum of state’s legal, organizational, economic measures, which main purpose is the regulation of the relations between employee and employer. It supports the human competitiveness on the labor market through (re)training, assistance, promoting self-employment, vocational counseling, and so on.

The main principle is that every person should earn money by himself, the state plays a role of mediator providing the employee an opportunity of employment (Bonoli 2010).

One of the primary functions of the active labor market policy is a prevention of unemployment. This phenomenon leads to such serious socioeconomic consequences as marginalization, the growth of criminal level, etc. Active labor market policy can lead to the reduction in the number of people receiving benefits and subsidies from the state, general economic growth, etc. (Bonoli 2010).

Last decades policies targeted at specific workforce groups or labor market segments are the most common. Usually, these targeting groups include socially unprotected workers, which are not competitive on a labor market. Women, older people, youth without work experience, indigenous people, foreign migrants are in focus. For example, European labor market policy follows the goal to improve woman participation in workforce through the reforms of legislation, the introduction of quotas, improvement of general education level (Bonoli 2010).

As can be seen, the overwhelming majority of theories mentioned above were developed in the USA. They provide a combination of universal principles and concepts. Despite their versatility, they cannot guarantee absolutely valid and exact result without cultural adaptation and modifications. According to Enriquez, “indigenization” of theories will assist to take into account not only key features of employment processes but also unique experiences and practice of cultural characterizes. He believes that in-depth research practices within concrete cultures based on indigenous and non-indigenous knowledge should be prioritized (Leung 2008). Consideration of specific cases will assist to identify not only specific features of particular (local) labor market but also will trace some tendencies, that can be compared. Finally, it will help to reexamine key theories and make them richer, more specific and applicable both for overall assessment and concrete cases. This approach will be dominant in current research. Next part will be devoted to the analyses of indigenous employment.

## **2.2 Indigenous employment**

This part of the paper will be devoted to the observation of the phenomenon of indigenous people on the labor market. At the present time, there are more than 370 000 000 of indigenous people that reside in more than 70 countries around the world. People that practice unique traditions possess the specific social, political and cultural features belongs to the indigenous groups. Indeed, their lifestyle and characteristics are distinct from dominating traditions of the

countries/societies, to which they belong (International Work Group for Indigenous Affairs 2014).

At the present time, indigenous people as a distinct social group is defined in different ways depends on a country. In various sources, indigenous peoples appear as an ethnic or economic minority, vulnerable or marginal social group, etc. The most distinct characteristics of indigenous peoples are offered by the International Work Group for Indigenous Affairs (IWGIA). According to it indigenous people is a group of people that possess following distinguishing features. In the first place, there are collective rights, unlike other ethnic minorities, indigenous peoples are fighting for the recognition of the rights on a collective rather than an individual level. In like manner, self-determination and self-identification are the central categories concerning indigenous peoples. At the present time, indigenous peoples are socially excluded in one way or another. Their main goal is to achieve equal treatment by the authorities and social structures while maintaining their uniqueness. (International Work Group for Indigenous Affairs 2014). Finally, the rights on the lands and resources are the main “indigenous challenge”. “Indigenous peoples face serious difficulties such as constant threats of territorial invasion and murder, plundering of their resources, cultural and legal discrimination, as well as a lack of recognition of their own institutions” (International Work Group for Indigenous Affairs 2014).

All things considered, indigenous people are the minority group in economic, cultural, political and other social spheres. Following the aim of preserving, developing and translating their cultural identity indigenous people face the specific issues and challenges. These challenges will be discovered in the context of the labor market in the next part of this chapter.

Understanding of the position of the indigenous people in the labor market requires the introduction of the concept of “indigenous workforce strategy”. Its main idea is a creation of sustainable and long-term collaboration between indigenous people and the labor market in the face of government, employers, training providers, industry and social environment in general. This strategy is a bilateral process which, on the one hand, meets the employer’s goals and, on the other hand, assist indigenous people to find exact place on the labor market in particular and in modern society in general (Australian Government 2010). Analysis of indigenous peoples’ position as a labor force requires consideration three key components. Firstly, information about location or concrete place of indigenous people’s residence will allow to analyze and predict their opportunities and perspectives in the target industries, regions or

sectors. Demanded data includes dynamic sociodemographic information. Secondly, such indicators and features of the labor market as indigenous labor supply and demand for indigenous labor (Australian Government 2010). “Building an Indigenous labor supply requires skills development, education and training, and improving labor market participation” (Australian Government 2010, p.2). Thirdly, the general socio-economic background of the labor market, for example, measures of supporting Indigenous enterprise and identifying when an Indigenous workforce strategy is appropriate (Australian Government 2010).

According to a Food and Agriculture Organization of United Nations, despite sociocultural uniqueness and importance of indigenous peoples, they are one of the most vulnerable social group in the world’s labor market. Indigenous people represent 5 percent of total world’s population and 15 percent of all the poor people in the world (Food and Agriculture organization of the United Nations 2017).

As has been noticed, American human resources’ literature defines employment mostly as a type of relationships between employee and employer at the level of the workplace. The mechanism of indigenous employment based on a (non-indigenous) classical scheme of employment. Correspondingly, all of the theories discussed above are applicable to the employment of indigenous peoples. Although it requires taking into account the additional details and aspects (Abbott 2006). With this intention, I will mention additional scientific approaches to this issue. British human resources’ literature offers a broader definition of the employment process. It includes not only collaboration on micro-level, but on the macro-level also, which is more applicable in the consideration of indigenous peoples’ employment (Abbott 2006).

Canadian school of human resource management in consideration of indigenous employment pays special attention to the consideration of the exact content and diversity of the particular indigenous group. It includes legal status of the group, several historical features, environmental characteristics of the residence area and so on (Simpson 2009). Australian human resources’ approach adds such factors as an understanding of the aboriginal family structure, development of the aboriginal networks, working with respected community elders, using artwork, etc. (Simpson 2009).

Concerning the analysis of the labor demand and labor supply in “indigenous context”, special attention should be paid to the ethnocultural features of the indigenous population and their role

in the employment process. Taking into consideration the theories of D. Super, R. Davis and L. Lofquist, socialization of a potential indigenous worker is under the influence of the special social institutions and socialization agents (Davis and Lofquist 1969). Correspondingly, interests, world outlook, and life goals are formed in special conditions, which affects professional choice and behavior on the labor market. The “matching process” will take a different path, since the reaction of the potential indigenous worker to the standard requirements of the labor market may be different (Nauta 2010).

As shown above, the socio-economic background plays a significant role in the labor market analysis. Considering indigenous peoples’ employment, in addition to the analysis of living standards, market segmentation, etc., discussion of the governmental and non-governmental activities in relation to indigenous people and ways of facing and overcoming the barriers to aboriginal employment is in focus (ECO Canada 2016).

Department of Health Western Australia mentions that the main source of these barriers is indigenous-unfriendly work environment. As can be seen, culturally void, negative and culturally unaware work environment “turns” indigenous workers into marginal group (Simpson 2009).

### **2.2.1 Indigenous people as a marginal group on the labor market**

“Marginalization is a social phenomenon, by which a minority or sub-group is excluded and their needs or desires ignored” (Power and Wilson 2000, p.14).

Robert Park meant by this term the social position of individuals at the border of two different conflicting cultures (Park 1928). According to Stonequist, the marginalized person involved in the cultural conflict and located between the upper and nether millstone. Such person is on the edge of each of the cultures but does not belong to any of them (Stonequist 1961).

In another word, the marginal group is such group of society, which cultural norms, values, and traditions are at odds or contrary to the dominant. Social marginalization creates marginalization on the labor market. The marginalized group has a restricted access to the employment (Power and Wilson 2000).

Ordinarily, there are few factors that can cause the vulnerability on the labor market. The first group of factors is connected with the employee’s human capital and included completed education or qualification. Socio-demographical characteristics also have a strong influence on the probability to become marginalized on the labor market. Usually, women, youth, elderly

people are considered as vulnerable labor groups. The opposite group of factors connected with the employer. It includes the unstable economic situation in the market or industry, low employability, “skills’ mismatch”, etc. (Power and Wilson 2000).

Members of marginal labor group display specific features. They prefer strictly fixed rules of labor relations, long-term job security. Usually, these people are strong in their system of values and loyalties. However, since it is a quite unstable group of workers, they do not have the loyalty to the work and attachment to the workplace (Mares and Sirovatka 2005).

Given these points, marginalization is interconnected with social deprivation and further stigmatization. Social and particular marginalization on the labor market leads to the losing of self-respect, social isolation, negative consequences on the family situation, loss of a person’s social bonds, etc. (Mares and Sirovatka 2005).

At the present time, marginalization on the labor market is associated primarily with the deep restructuring of the system of production in post-industrial societies. Such marginalization is a consequence of the technological revolution and employment crisis. Within this process particular labor groups carried a downward social movement, constantly losing the former social position, status, prestige and living conditions (Power and Wilson 2000). Labor marginalization can lead to such serious social issues and challenges as deep hostility to the existing public institutions, extreme forms of social impatience, denial of any kind of organization, extreme individualism and so on. Indeed, marginals’ value system can have an impact on the cultural, economic and political development of society. Regardless of the composition of the marginalized groups in the labor market, they face common challenges, barriers and develop similar mechanisms for the integration and sustainable development (Power and Wilson 2000).

### **2.2.2 Indigenous people as a discriminated group on the labor market**

Discrimination in the labor market is a process that cannot be measured by one simple tool. “It is not only that people tend to hide actions that are either not legal or not widely sanctioned in society, rather discrimination is sometimes indirect and unintentional resulting from seemingly neutral rules and regulations that exclude Indigenous people from participation in the labor market” (Hunter 2003, p. 3).

Arceo-Gomez and Campos-Vazquez came to the conclusion, that in modern labor market discrimination have deep roots in the indigenous appearance of the candidate rather than

physical differentiation. On the Mexican example, they demonstrate the employers can refuse a candidate based on the provided personal information on marital status, sex, origin, personal characteristics. Mexican labor law, as well as in other countries, does not directly prohibit the inclusion of personal information in the application process. This factor, directly and indirectly, develops labor market marginalization (Arceo-Gomez & Campos-Vazquez 2014).

MacIsaac and Patrinos study some factors that have an influence on employment and wage of indigenous people in comparison with non-indigenous people in Peru. Previous research of indigenous people in Canada, USA and Guatemala shows such tendency as, the lower amount of human capital they possess, the higher is the probability of facing the discrimination on the labor market. “Discrimination in the labor market can directly affect earnings, occupational attainment and training access; or it can indirect, trough discrimination in the acquisition of skills, prior to entering the labor market” (MacIsaac and Patrinos 1995, p.224).

According to the statistical data, the indigenous population, in general, have the lower level of education and professional skills. Only university education can increase the potential income of indigenous people on 50 percent. At the present time, the minority of the indigenous population has a university education. However, there is a common tendency: having equal human capital (for example the same level of education, language skills), indigenous workers get almost twice less income compared with non-indigenous workers (MacIsaac and Patrinos 1995). Given this points, marginalization of indigenous people "minimizes the impact of human capital" in the process of employment. For example, in reality, work experience does not increase the chances for indigenous workers for the employment. Indigenous people have earned an advantage only in the public sector, but not in private. In essence, the majority of the indigenous population employed in the secondary labor market, specifically on “low-qualified positions” (MacIsaac and Patrinos 1995).

In Australia, indigenous peoples have one of the most disadvantaged places in the labor market among all of the developed countries (Duncan et al. 2016). Only half of the indigenous working-age population are presented on the labor market. State statistical data shows not so high level of discrimination. Like in other countries discrimination in Australia is prevented by the laws. This official analysis of discrimination on the labor market is based on such worker’s characteristics as age and household composition; intervening factors (education) and location of residence. Large families, people with disabilities, etc. have a special protection from the state (Duncan et al. 2016). To demonstrate the actual state of affairs, Duncan et al. introduced

the concept of the “residual discrimination”. It is such form of “latent discrimination” that officially not breaking the laws, but in fact, creates the barriers to indigenous employees because of their cultural belonging, self-identification as a representative of a particular clan, tribal or language group (Duncan et al. 2016).

As an illustration, age and amount of children are the most significant features, that cause a residual discrimination and bring to a worker a marginal status. For this reason, the most vulnerable and marginalized group of workers is represented by the young well educated indigenous women that have children. Altogether, general statistical data of discrimination not always can fully show the real challenges of indigenous people in the labor market. Such information can only distinguish “good” from “bad” employers. An alternative measure of discrimination offers a broader in-depth approach, which allows taking into account such factors as sexual harassment, verbal abuse from co-workers or clients, etc. (Duncan et al. 2016).

To sum up, marginalization on the labor market has a “closed character”. Marginal position in the labor market is a stigma, that does not allow a particular group to move up in the social hierarchy. This stigma causes them to be even more vulnerable and disadvantaged. All things considered, it is almost impossible to get rid of this social status/position in conditions of labor market without the intervention of the state and other external factors. This challenge is also complicated by the following issue. The development of the governmental social programs aimed at the demarginalization of indigenous people on a labor market requires special indicators. Although, there are few general statistical indicators on the state and local level, but on the international level, they don't exist yet. (Swepston 2011).

### **2.3 Indigenous peoples’ rights on international level**

Moving from the general to the particular, let us consider the legal issues of the indigenous population in the labor market. The presence of indigenous people in the territories, where gas and oil industry takes place, creates challenges to “both sides”. At the present time, the compliance with the legislation comes to the foreground for the gas and oil industry. If indigenous people experience a certain effect from the gas and oil industry’s activities, special legal standards regulate the relations between the indigenous and non-indigenous parties. Indigenous people as a legal owner of the lands and resources expecting the opportunities for communities to benefit from the industrial presence. On the international level such requirements are regulated by such legal acts as ILO Convention on Indigenous and Tribal

Peoples (No. 169) and The United Nations Declaration on the Rights of Indigenous Peoples (IPIECA 2012).

### **2.3.1 ILO Convention on Indigenous and Tribal Peoples (No. 169)**

It is one of the basic international legislation acts, that regulates relationships between indigenous and non-indigenous people. It is ratified by various countries, including Norway (In force from 19 Jun 1990). As can be seen in the example of Canada, this convention influenced the development of national legislation base concerning indigenous people. The main tenet of the convention is the proclamation of equal rights for indigenous peoples and the rest of the population of the lands where they reside. The convention regulates all aspects of indigenous life: political, economic, social and cultural. Considering land rights, the government of the particular country has to determine which land belongs to indigenous people and to protect their property rights. Protection is carried out by means of the creation and development of the state and local legislative framework. Indigenous people have a legal right to protect and control the resources on their lands. It should be mentioned, that this convention regulates recruitment and conditions of employment of the indigenous people. The main purpose is to prevent discrimination against indigenous peoples in the labor market (the right to safe work, corresponding wages, social support from the state, etc.) (International Labor Organization 2003).

### **2.3.2 The United Nations Declaration on the Rights of Indigenous Peoples**

It is another key element in the issue of regulation indigenous rights on the international level. The declaration is not a convention, that is why it has another legal status and is more advisory in nature. If the “ILO 169 convention” is mostly focused on determination of the state responsibilities in relation to indigenous peoples, the declaration puts more emphasis on the rights of indigenous peoples. Indigenous peoples cannot be forcibly displaced from their lands. Relocation is possible only after agreement with the opportunities of compensation and the option of return. Indigenous peoples have the right to work and labor protection on a par with non-indigenous populations. They have the right to the lands, territories, and resources which they have traditionally owned. They may dispose of them and use them. And the state should legally protect this right with due respect to the customs, traditions and land tenure systems of the indigenous peoples. Moreover, indigenous peoples are guaranteed the right to the protection of the environment productive capacity of their lands. The government should promote these measures (United Nations 2008)

By and large, these and other international rules, standards, conventions and declarations laid the foundation of legal recognition of indigenous rights on a national level. However, the creation of the legal base for the protection indigenous rights on a state level is a dynamic process which is at different stages of development in different countries.

#### **2.4 Indigenous peoples' rights on national level**

As mentioned above, international conventions, principles and declarations concerning indigenous rights laid the foundation for national legislation. Despite the universality and long history of the development of the international regulatory framework, not all of them are equally ratified and applicable in each particular country. Therefore, countries strive to develop their own laws regarding the rights of indigenous peoples to the land. Following the objective of this research, I will pay special attention to the analysis of the indigenous peoples' rights in Canada and Norway.

In Canada, the history of the development of the protection of indigenous peoples' rights dates back to the British Crown's Royal Proclamation of 1763. Indeed, Canada's constitution 1982 recognized and defended indigenous rights to self-determination, land, etc. Further, the rights of indigenous peoples were developed by Canadian courts (Anaya 2014). According to the basic principle concerning the rights of indigenous peoples in Canada, "there is a duty to consult aboriginal peoples when their rights – asserted or recognized – may be affected by government and industrial action" (Anaya 2014, p.18). In reality, this principle is formally observed. In essence, such consultations are held at the stage when the issue has been finally resolved by the government and industrial sector, the project has started. Ordinarily, such consultations are overloaded with bureaucratic procedures, and therefore indigenous peoples who do not have special jurisprudence knowledge cannot properly influence the situation. After all, real dialogue is impossible (Anaya 2014).

By far Canada was one of the first countries in the modern era, which set a goal to expand the constitutional protection of the rights of indigenous peoples. In the meantime, the situation is fairly deplorable, on the one hand, indigenous peoples reside rich economically profitable territories, on the other hand, they have low standards of living and poverty. Altogether, In Canada, gas and oil industry is mostly focused on bringing profit to the non-indigenous population (Anaya 2014).

First of all, the federal and provincial governments should seek to maximize the control of indigenous peoples over the gas and oil activities on their lands, as well as the development of

the benefits derived from it. Projects of development resources on indigenous lands must comply with their aboriginal rights and treaties, but in any case not prejudice the rights of the indigenous population. To sum up, the legal and regulatory framework concerning indigenous peoples, based on the international standard exists but does not work properly (Anaya 2014).

Development of the legislation concerning indigenous rights in Norway originates in the 1950s. Up to that time, international norms on the protection of the rights of indigenous peoples were not taken into account, because of the state's position, that the Sami are totally integrated into the Norwegian society. In time, this position was revised and in 1990 Norway became the first country that ratified the Indigenous and Tribal Peoples Convention (ILO 169 convention). In the long run, the main postulates of this convention served as the basis for the Norwegian Finnmark Act. Under this national law, the Finnmark Commission, and the Uncultivated Land Tribunal for Finnmark were established and became the main actors to investigate indigenous land rights and settle indigenous land disputes (Ravna 2016).

Previously, the Norwegian government believed that nomadic Saami should not have formal legal rights to use land, water, and other natural resources. Adoption of the Finnmark Act gave 95 percent of the Finnmark county's territory under the management of the Finnmark Estate agency. In essence, Sami received individual and collective ownership and the right to use land and water resources in Finnmark. In fact, there was a strengthening of the position of the Sami at the national level (Ravna 2016).

Another document, that should be mentioned is the Norwegian act relating to the acquisition and extraction of mineral resources (the Minerals Act). The section 17 proclaims that industrial activities can not be carried out on the territory of the Finnmark if they possess a potential threat to the interests of the Saami, their traditional way of life and in particular reindeer husbandry (Act of 19 June 2009 No. 101 relating to the acquisition and extraction of mineral resources)

Indra Øverland in his last research found out that the oil industry is better equipped than the mining companies for maintaining indigenous people's rights in the Arctic. Compliance with legislation and accounting indigenous interests have a positive effect on the overall activity of gas and oil companies. Such action provides these companies with a good reputation among the indigenous and non-indigenous parts of society. In the future, this reputation leads to easier decision making process and more effective negotiation with indigenous communities. Moreover, the negative environmental effect from gas and oil industry is more visible, than

from the other industrial actions, that is why companies are highly interested in creating and maintaining a positive image. In the rating lists, provided by the Øverland, Canadian, Norwegian and Russian gas and oil companies are leaders. For example, in Norway, the issues of environmental protection and indigenous people rights have a high priority at the state level. Oil and gas industry follows this trend (Storholm 2017)

In the long run, despite the significant success of Norway in the development of the regulatory and legal framework governing the rights of indigenous peoples, some challenges still require the solution. Firstly, Finnmark Act does not grant the Saami the right to fish in salt water, mining, and oil rights. Secondly, Finnmark Act does not pay enough attention to the Eastern Sami. That is why the development of the point measures to protect the rights of indigenous peoples is necessary (Ravna 2016).

### **Chapter 3. Research methodology**

Social sciences have two basic components: knowledge and the way of its developing. The first one refers to the methodological knowledge, that includes philosophical and methodological principles; knowledge of the methods, their development and application, etc. Ways of developing of the knowledge are called research methodology. Research methodology is a specific set of “tools” for achieving research objectives. Such objectives define a choice of concrete procedures for collecting, analyzing and interpretation of the observations. Methods in social sciences include the principles of the organization of research activities, regulatory norms or rules, scheme of scientific investigation (Degu and Yigzaw 2006).

Within this chapter I will describe the main methodological principles, that will be used in the current research. Firstly, I will explain the choice of qualitative research methods. Secondly, moving from general to particular I will specifically describe each method, that will be used in the empirical part of this paper. Thirdly, I will present the main ethical considerations, that have to be taken into account conducting a research.

In this paper, I will mainly use the qualitative research methods. Chiefly, I will use case study and document analysis. What caused this choice? From a theoretical perspective, these qualitative research strategies allow getting richer verbal and textual data, reflecting the essence of the social environment. Qualitative analysis usually involves an inductive research approach, which requires a deep understanding of the issue (Berg & Lune 2012).

From the practical perspective, the choice of the specific research methods is caused by some limitations. Firstly, under the circumstances of the “vast geography of the research”, the collection of quantitative data requires large financial investments. Frequently, the conduction of the quantitative research requires a direct presence in the research field, which also leads to the significant spending of money and time. Qualitative research methods, in this case, solve these problems (Berg & Lune 2012).

As can be seen, the choice of such qualitative research methods as the documents and the case study is justified by following reasons. In the first place, the potential amount of obtained data will allow to meet the time limits, as well as the limitations on the scope of work. In addition, the chosen research methods will help to avoid sociocultural problems. In essence, the English language is the main language of this research and the master degree program. It creates significant barriers to data collection. A preliminary study showed that interviewing in English is a challenge for respondents and as a result, response to the proposal to participate in the research is low.

### **3.1 Case study**

Zucker defines case study as a “systematic inquiry into an event or a set of related events which aims to describe and explain the phenomenon of interest” (Zucker 2009, p. 302).

According to Gomm et al., case study refers to the detailed qualitative analysis of different unstructured sets of data united by particular criteria. Such approach facilitates to conduct the comparison, rather than generalization (Gomm et al. 2009). Case study solves the problem of obtaining a comprehensive assessment of the real life situation, developing independently from the researcher. In my opinion, a case study is not only research method, but a broader methodology phenomenon. It refers not only to the concrete mechanism of obtaining social research but a specific way of thinking, which facilitates to construct research design and select the necessary research strategies for the field empirical work (Zucker 2009).

For understanding the mechanism of case study research let us discuss main elements of its internal structure. Zainal’s classification offers three types of case study research: exploratory, descriptive and explanatory. Exploratory case study research asks general questions and useful for pre-studying of the research phenomenon and forming general context. A descriptive case study is mostly focused on collecting as many details as it possible. Its goal is a movement from general to particular, from classic theories of concrete phenomenon and case. Finally, explanatory type of case study associated with the search for causal links between surface and

deep levels. Also, there are such other types of case study research as interpretive and evaluative case studies (Zainal 2007).

Summarizing, a case study is a sum of scientific tools for diagnostic of the issue, development of methods and strategies for evaluation of the observed phenomenon. The main goal of the case study is an observation of the phenomenon from different positions, searching for missing information and arguing researcher's point of view in a sufficient way.

The mechanism of conducting case study research is based on general research methodology in social sciences. It starts from the choosing of the case (target) area. The members of the target group form a "bounded system". Within the first stage, there is an implementation of problematic structuring, which assumes isolation of a certain set of issues, their typology, characteristics, consequences, ways of resolution (problem analysis). The next stage is the identification of the reasons that led to this situation, and the consequences of its deployment (cause-and-effect analysis). Then the researcher constructs the system of assessments of the situation, its components, conditions, consequences, actors (axiological analysis). The last phase includes the development and planning the concrete research investigations for obtaining the required field information (Berg and Lune 2012).

In this paper, qualitative research paradigm will be the leading. I will use the combination of descriptive and explanatory types of the case study. Following the main goal of the research to observe the position of the local Arctic community towards employment in gas and oil industry based on the examples (cases) of remote Arctic areas in Norway (Finnmark) and in Canada (Alberta), these two countries will represent two separate cases.

In brief, analysis of these cases will be based on the same scheme. Indeed, the usage of the same research methods allows conducting deep consideration in each of the cases. Also, such technique will create a sustainable basis for further comparison and generalization (Berg and Lune 2012). These two cases can be compared because they have certain differences and similarities. On the one hand, both of the target areas in Canada and Norway have vast deposits of natural resources and geographically located on the Northern territory. In addition, these territories are the place of the residence of the indigenous peoples. On the other hand, the target areas belong to the two distinct countries with different legislation bases, socio-economic conditions, "historical past", etc.

Characterization of the tendencies of oil and gas labor market of Canada and Norway will be based on a document analysis. This method will allow us to identify programs, tools, and strategies for recruiting and motivating local workers in these countries.

Following the goals of the case study methodological approach, further, I will describe document analysis as a scientific tool for gathering required empirical data.

### **3.1.1 Document analysis**

Document analysis is a scientific tool used to obtain sociological information from documentary sources for exploring social processes and phenomena in order to solve certain research problems (Mason 2002).

Document analysis is devoted to the studying of the variety of written documents from governmental papers and academic articles to an official electronic report of different organizations. Document analysis classifies the documents in some categories. Depends on a way of storing information there are written documents (information is in the form of a text), statistical data (a digital form of presentation), iconographic documentation (video, film, photo documentation), phonetic documents (radio, audio, other sound recordings). Also, documents can be distinguished by the nature of the source: official and unofficial (Mason 2002).

There are two types of document analysis: non-formalized (qualitative, traditional) and formalized (quantitative, content analysis). The main difference between these types is that non-formalized document analyses are focused on the interpretation of data contained in the document, formalized document analysis transits qualitative data contained in the text into quantitative data and their subsequent processing by statistical tools (Mason 2002).

Traditionally this method is used in combination with the other qualitative research methods to get a complete picture of the phenomenon. According to Bowen, this research method is the most applicable to the case study approach to produce a rich description of the single phenomenon (Bowen 2009). It should be mentioned, that the more diverse sources of documents the richer and more accurate will be the result of the case study.

This research technique has its advantages. Firstly, this method is not so time-consuming and mostly focused on data selection, rather than data gathering. Secondly, a large number of documents are in the public domain, so the limitations in this study are much smaller, and the possibilities are greater. Finally, documents are a stable source of information, that can cover a wide range of information (Bowen 2009).

Document analysis has some specific preparatory actions. Firstly, the researcher formulates the purposes of the document analysis. Such measure helps the researcher to narrow down the focus and pay special attention to the certain aspects. Secondly, the researcher clarifies the document analysis criteria. This step facilitates sustainable assessment and evaluation of the documents, which will help to answer the research questions. Preparatory actions are necessary because for the most part documents have other than research objectives. In other words, different documents have different goals and functions. Preparatory actions create special criteria that allow to systematize the content of documents and compare them (Chism 2007).

After the completion of the preparatory stage, the researcher goes directly to the analysis of documents, which includes such steps as skimming, reading, and interpretation. Skimming can also be titled as a pre-phase of document analysis. Skimming means the fast reading of the document in order to catch the main idea of the text without spending the time on details. It helps the researcher to choose the relevant documents of the research area. Reading and interpretation phases directly connected with the thematic analysis of the text. The researcher's task is to have a closer and detailed look at the text, characterization of the data and if it is necessary coding the information (used in quantitative document analysis). It should be mentioned, that document analysis is totally different from general reading of the texts because the researcher takes a critical stance. The researcher should take into account not only the content of the text but also the circumstances and reasons under which the document was created. This is one of the ways to determine the relevance of documents to the research issue and purpose (Bowen 2009).

As shown above, document analysis will be a key method exploring Canadian and Norwegian cases in the current research. The governmental structure of these countries is characterized by widespread use of written documents. Moreover, these countries have a highly developed electronic document management system. It is possible to say, that in this case, documents are reliable evidence of phenomena occurring in reality. Finally, the current issues of the Circumpolar region are also a frequent topic in the academic environment. The above factors, as well as the geographic features of the research area, justify the choice of this research strategy.

### **3.2 Ethical considerations**

Research ethics is a combination of administrative and moral principles, which guide the researcher within the scientific activity. Sociologists Robert Merton offered four main ethical

principles of social research: universalism (the research should be maximally objective from the world outlook and the author's beliefs); communism (the results of the research should be opened and available to the scientific community); disinterestedness (satisfaction from solving the problem is the main motivation of the researcher, rather than the material reward) and organized skepticism (critical attitude of the researcher to his own ideas, and to the ideas of his colleagues) (Macfarlane & Cheng 2008).

Another source of ethical considerations is American Sociological Association Code of Ethics. According to this document, the main ethical research challenge is keeping a balance between following the freedom of research and results' publication and protecting the privacy of the informants (American Sociological Association 1999). Chiefly, in this paper following this principle is quite easy because all of the documents and publications used in document analysis have open access. In Norway, one of the main sources of information about ethics in the research belongs to the committee for the social sciences and the humanities (NESH). It proclaimed that "research must be safeguarded so that its findings and conclusions are not withheld or selectively reported" (Nagell 2008, p. 41).

Given these points, all of these considerations based on general ethical principles and seems obvious. A further part of this chapter will be devoted to the observation some ethical principles of working with indigenous people.

### **3.2.1 Ethics in Indigenous research**

The ethical research challenge is following already from the title. What should we call the people, that will be studied within this paper: aboriginal, native, indigenous, first nations, Indians?

Analyzing the scientific literature, I came to the solution, that there is no single correct answer to this question. Most of the research guides and organizations advice to ask the concrete person with whom you are having an interview. However, such approach cannot be applicable for the concrete research. Within document analysis, there is no direct communication with the indigenous people. Moreover, the documents that were chosen for the analysis are characterized by the absence of single standardized terminology.

*Aboriginal people* is the term that is actively used in Canada. It refers to the original peoples of Canada and can be met in the Constitution Act of 1982. According to section 35 of this act, this term has mostly collective character and usually implies Inuit, Métis and First Nations

(Indians). Aboriginal people are people, who identify culturally and ethnically with indigenous peoplehood (Indigenous and Northern Affairs of Canada 2012).

Discovering the definition of *aboriginal people*, I've mentioned that usually, it goes hand in hand with the word "*indigenous*". They commonly used for each other's definition. Are they synonyms? According to the dictionary, the adjective indigenous is originating in and characteristic of a particular region or country; the same as native (Oxford Living Dictionaries 2017a). National Aboriginal Health organization also builds its approach on this definition and declares, that "Aboriginal Peoples are indeed indigenous to North America. Its meaning is similar to Aboriginal Peoples, Native Peoples or First Peoples" (NAHO 2017). I would say, that "indigenous people" is a European analog of Canadian "aboriginal people". However, we can observe the same situation, in the case of defining the category of indigenous, various sources use the word "*Native*".

"*Native* means being the place or environment in which a person was born or a thing came into being" (Oxford Living Dictionaries 2017b). This word has a broader meaning than aboriginal or indigenous. It can be applicable to a non-indigenous category of people also. Summarizing, it is possible to say that in our particular context the words Indigenous, Native and Aboriginal refers to the same group of people. Despite the minor differences they used as the synonyms by both scientific and publicist sources. In this paper, I will use them as an equal, similar in value concepts.

Moving from the general to the particular, there is also the issue of definitions on the local level. Considering Canada, in addition to the already discussed terms relating to indigenous peoples, we can meet such term as *Indian*. The origin of this term dates back to Christopher Columbus. This title arose in the 15<sup>th</sup> century from a misunderstanding of the first European explorers, that considered the newly discovered land as India. "Indian is the legal identity of an Indigenous person who is registered under the Indian Act" (Joseph 2016, p. 11). National Aboriginal Health organization mentions that this category includes such indigenous people of Canada, who are not Inuit or Métis. It should be mentioned, that nowadays this word is mostly used in citing the books or official documents, but not in front of the individuals. In a personal communication, it has derogatory and racist connotation (Indigenous and Northern Affairs of Canada 2012).

Indigenous and Northern Affairs mention that instead of the term Indian can be replaced by *First Nations* people. In short, it refers to the descendants of the original inhabitants of Canada.

The term “First nations” unites various indigenous people with the specific culture, although it is narrower than “aboriginal” (Indigenous and Northern Affairs of Canada 2012).

Regarding the indigenous people of Norway, there is also more than one word, describing this part of the population. This paper will explore Sami as an indigenous people of Norway and the other countries of the Circumpolar region. However, in some sources, we can meet such term as Lapp(s). *Sami* call themselves as Saam’ or Saam’lja. In some Russian and Swedish historical chronicles dated 1000 AD, there is a common using of word *Lapp* or Lop’. A brief analysis of etymology of the word Lapp there are few versions. It is rooted in old Swedish word *lappar* which translates as Sami. According to another version, it is connected with the title of Dutch fishing gear *looper*. In Norway, people called Sami “Finner”, which later became the reason for the name of the Finnmark region (Rankama and Kankaanpää 2007). Within last decades the word Sami is mostly using in the international scope and particularly on the territory of Russia and Scandinavian Countries. In most scientific sources, there is a common using of the word Sami, but few of them still appeals the word “Lapp”. According to my personal experience, in the scientific literature, this word perceives as unprofessional and colloquial. Sami themselves perceive it as a racist and pejorative term. That is why within this paper I will use the word “Sami”.

Indigenous research ethics is a vast research area. It is not just a sum of rules and regulations, but the respectful and responsible treatment of indigenous people. According to Kuokkanen, research that connected with Sami should follow broader goal than just individual purposes of the scientists. “Giving back” research principle means that the research is not a tool of colonization anymore, the research should be significant for Sami community and improve their well-being (Kuokkanen 2008). This principle shapes the whole research methodology. Empirical research should start with the open and clear recognition of the research aims in front of the indigenous community. Development of the research methodology should take into account the fact that indigenous people are a socially vulnerable group and afraid “being used” and “taken advantage of” (Bia 2008).

The next ethical feature of a research process is choosing research paradigm. In comparison to “western paradigm” described by R. Merton, “indigenous paradigm would be a culturally specific discourse based on indigenous peoples’ premises, values and world view” (Kuokkanen 2000, p. 413). According to Wilson, the most suitable methods for working with indigenous people are qualitative: focus group, storytelling, personal narrative, participatory action

research. For the most in indigenous research, the researcher has a special position. He is not just a scientist, who collects the information, but the person, who shares his personal experience and sociocultural background (Wilson 2000).

### **3.3. Research limitations**

I have analyzed several methods and research strategies above. Although, all of them have their strengths and weaknesses which bring certain limitations to the paper. The case study approach can be characterized as an approach with a lack of rigor of the procedure of research. Some features and factors can easily be ignored or interpreted subjectively. Moreover, a case study can involve analysis of completely different information which makes generalization difficult. The nature of the document analysis is connected with the accessing different information, which can visually create the impression of the fragmented text (Bowen 2009).

In essence, use of document analysis can sometimes lead to a narrow selection of documents. As a result, the research can be focused only on one aspect of the phenomenon, ignoring others. Moreover, it is almost impossible to achieve full objectivity in the interpretation of documents because of the human factor. Finally, the results of the research are directly connected with the reliability of information and reliability of documents (Bowen 2009).

Another group of limitations is connected with the cultural type of bias. Since I am a native Russian speaker, my language skills in English are far from perfect, which can lead to some misunderstandings within the research process.

Research aims and objectives of this paper are formulated pretty ambitiously. Due to the limited size of this paper, there is a probability of insufficient depth of some aspects of this study. Finally, there will be specific limitations applied for each concrete case. They will be specifically mentioned in further parts of this paper.

The next chapter will be devoted to the observation of the position of the local Arctic community towards gas and oil industry based on the example of Alberta province in Canada. Turning to the terms, the local community is a wide concept, which defines the sum of people connected by daily interaction, common environment, geographical location, etc. In the current research, I will divide the broad category of the local community into the indigenous and non-indigenous groups due to the socio-cultural characteristics of the population of the Circumpolar

region. Such approach will allow to conduct more detailed analysis taking into account the specific characteristics of the target research area.

## **Chapter 4. Canadian case.**

### **4.1 Introduction to the target area**

Canada is located in the North America. Canada is a federation which consists of ten provinces and three territories. In 2010, about 34 000 000 people lived in Canada, taking into account the vast territory of the country, Canada's population has a low population density, about 3.5 people per square kilometer. The use of natural resources (in particular logging and the oil and gas industry) and trade are the main sources of income for the Canadian economy. Thus, the Southern regions of Canada are suppliers of agricultural products, while the Northern regions are resource-oriented (Hayes 2008).

Alberta is a province of Canada, which occupies 7 percent of the total area of the country. Despite the fact that formally Alberta belongs to the Western Canada, the socio-geographical and climatic characteristics of these territories allow us to say that they are a part of the Circumpolar region (Government of Alberta 2015a). The total population of Alberta is 4 253 million of people (2016) (Government of Alberta 2015a). Alberta is a home of more than 20 ethnic groups, the most numerous are English, Canadian, and German. Also, three main aboriginal groups are located there: Metis, First Nations, and Inuit (Government of Alberta 2015a).

Another key feature is the industrial characteristics of the local labor market. Alberta's industrial portrait was shaped by the abundance of forest, energy and land resources. Alberta has second biggest deposits of oil in the world after Saudi Arabia (around 173 billion barrels). According to one of the forecasts, there is a strong possibility, that Alberta will become world's leading energy provider in the nearest future. The most industrial zone of Province is The Calgary–Edmonton Corridor, hence Calgary and Edmonton are the biggest cities in the Alberta province. (Chambers 2008).

It's important to mention that much of oil is found in the oil sands of northern Alberta. Last decades the industry nearly tripled in size. While worldwide fall in oil prices causes the slowing growth of the industry, the Canadian economy, especially gas, and oil sector is characterized by sustainability. The average annual GDP growth of Alberta is 3.2 percent per year (Chambers 2008).

Further, I will continue describing Alberta's labor market characteristics based on the theoretical categories that were developed in previous part of this paper.

#### **4.2 Social and employment trends of the labor market**

The demographic trends of this region are quite positive. The age-sex pyramid is progressive. A number of youth (786 900 people of age 0-14 years) prevails over the number of elderly people (506 800 people in age 65 and older). The number of working age population is 2 959 200 or 69,6 percent. More than 80 percent of the population resides in urban areas. (Government of Alberta 2015a).

The economic development of this region stimulates interprovincial migration and immigration, which complemented the process of population's growth. An inter-provincial worker is a person who engages in labor migration. Such workers are not becoming residents of target province. Within last decades the number of such employees is increasing (from 5.7 percent to 6.2 percent of provincial employment). The amount of inter-provincial employees is much higher than a number of workers, that moving to the Alberta. Most of these workers are men, aged from 45 to 64 years, coming from neighboring provinces of Saskatchewan and British Columbia. These migrants mainly work in the construction, oil and gas and agriculture industries (Laporte et al. 2013).

In addition to inter-provincial labor migration, there is a labor immigration to Canada from the rest part of the world. The movement of people around the world in search of better jobs is an integral part of the modern economy. According to statistical data of 2015, Alberta has the third highest amount of immigrant workforce in Canada. Among the working age population of Alberta, there is 22,2 percent of immigrants. Most of them are males in the working age. The dominant spheres of immigrant workers' occupation are services-producing sector, healthcare, and social assistance as well as trade industry. A number of immigrants that working full-time is slightly higher than average provincial indicators (Government of Alberta 2015b).

Despite the fact, that Alberta has one of the highest average incomes in Canada, there is a strong tendency to inequality which leads to the development of poverty. Approximately 10 percent of province's population lives in poverty. There are several unofficial indicators of poverty measurement. They testify to the reduction of poverty in Alberta. Within last decade, the level of low-income cut-off after tax decreased from 11,1 percent (2000) to 5,4 percent (2012). In the same period, the number of welfare recipients also decreased from 63 400 to 59 356.

However, we cannot argue that the poverty problem has been completely solved. Low-income measurement shows the tendency to reduce from 10,3 percent (2000) to 6,4 percent (2012), however, there is a growing tendency on 1,2 percent in 2013 (Canada Without Poverty 2015).

When the average person thinks about poverty he immediately imagines unemployed citizen which is engaged in begging. However, according to the “A Profile of Poverty in Edmonton”, “Alberta has the highest rate of working poverty of any Canadian province. In 2011, over 59 percent of Alberta children in poverty lived in families where one or both parents worked full-time for the entire year” (Edmonton Social Planning Council 2015, p.3). This problem occurs twice as frequently among indigenous part of Alberta’s population. Every eight’s citizen of Edmonton suffers from poverty every day. The lower the age, the greater the probability of falling into a risk group. As it was mentioned above, the problems of poverty and low wages are interrelated. People with the lowest income in Alberta has the worst wage in Canada. Statistic department of Canada defined the poverty line as an income which is equal to \$23298 per year. The minimum wage of the full-time employed worker in Alberta equals \$18109. One of the richest provinces has one of the worst situation with salaries (Canada without poverty 2015).

Specific actions aimed to reduce the level of poverty are reflected in poverty plan led by “Action to End Poverty” in Alberta. For example, Alberta’s government planned to increase the minimal wage from \$12.20/hour (2016) to \$15/hour (2018). This plan as a part of social policy had to be released in 2013, but it is still in the formulation stage and is not running yet (Canada without poverty 2015).

The labor force participation rate is one of the basic indicators in the labor market analysis. It is the amount of population that is able to work and working/ in searching for a job among the total population. In Alberta, this indicator is not only the highest in Canada, but the highest in the western world, and in 2007 it was equal to 74,1 percent (absolute maximum) or around 2,5 million people. Analyzing this indicator within last 30 years, it has an upward trend. Regarding gender issue, there is a tendency of increasing woman participation into labor forces (from 51percent to 67 percent). The median age of labor force has a tendency to “aging”, within the last 30 years a number of young people reduced, due to the development of workplaces requires work experience and specific professional skills (Chambers 2008).

Within the last five years, the amount of employed population in Alberta increased by 244 900 people. In 2015 this indicator increased by 1.2 percent comparing with 2014. It is the maximum in the whole country. The highest level of unemployment is among the people younger than 25 years. More than 60 percent of all vacancies require higher education. However, the unemployment rate is rising as well (from 4,7 percent to 6 percent in 2015) Male unemployment is growing faster than female (Government of Alberta 2016a).

Integration into the international market is a current trend of Alberta's labor market. Alberta's government prioritizes the entrance of the province into the international arena. They developed an international strategy concerning workforce extension and productivity gains. The main goal is to stimulate work migration of high-skilled employees to this region, specifically knowledge workers and business leaders. Also, the local government is "actively support the province's commitment to full and meaningful Aboriginal participation in the workforce" (Government of Alberta 2010b, p.13).

Labor market policy of Canada includes various measures and documents. One of the most significant is "The Employment Insurance Act". Its main aim is to assist the population in preparing, obtaining and maintaining the employment. This document includes unemployment and employment benefits, administrative provisions and other sections. Altogether employment benefits include four categories. The first one has targeted wage subsidies, it is the way to stimulate the employers to hire such workers they would not hire in other situations. The second is skill developing the program, which covers the cost of (re)training of the worker so that he can return to work. The third kind of employment benefit is self-employment assistance. This kind of help assists people to start their own business. And finally, job creation partnerships aimed at providing the opportunity to receive the missing work experience in non-profit and community organizations (Brisson 2015).

Another document, that has a specific meaning for the labor market policy of Canada is the "Employment Equity Act", which is aimed at the protection of different population's groups including aboriginal peoples. This act promotes, supports and enhances the employment equity for the population. In other words, this law is a way to protect indigenous people from discrimination and wrong attitude; also it stimulates employers and various government agencies to employ these people (Human Resources and Skills Development Canada 2012).

“Aboriginal employment preferences policy” deserves a special attention within the analysis of the labor market. Its main aim to provide aboriginal people with preferential treatment in hiring, promotion or other aspects of employment. This policy is based on the principles of the Canadian constitution, Canadian human rights act to provincial laws and Declaration on the Rights of Indigenous Peoples. “Aboriginal employment preferences policy” is applicable in such scopes, where the representation of indigenous people is necessary. For the most part in cultural and political committees, governments of some territories (like Nunavut) and so on. In essence, this policy is applicable in various social scopes concerning indigenous peoples of Alberta in general and local gas and oil labor market in particular (Canadian Human Rights Commission 2012).

In addition to employee and employer, labor market of Alberta has some other “actors” that need to be considered. Aboriginal human resource council is an advisory organization, which aims to foster collaboration and partnership of various types of employers and indigenous peoples, businesses, and communities. Their projects help to increase workplace performance, create real social and economic inclusion for Aboriginal people, communities, and workplaces, etc. (Aboriginal Human Resource Council 2012). Petroleum Human resources council is a national, not-for-profit, collaborative forum, which collaborates with the industry, government, educators and training agencies to create sufficient workforce for gas and oil industry. One of their projects is the development of rotational workforce in Alberta’s gas and oil industry. The main idea is to attract local people to work in special camps, but not to change the permanent place of residence. One of the indirect aims is to increase the participation of local communities in gas and oil labor market (TalentEgg 2017).

These organizations as a mediator help gas and oil labor market of Alberta and local and indigenous communities create specific conditions to facilitate meeting each other’s needs.

To summarize, “the economic development monitoring” conducted annually within last 10 years in Canada forecasts the following features and challenges for Alberta’s labor market. In general, the oil and gas labor market of Alberta remain fairly resilient to oil price shocks, but it will take several years in order to reach an equilibrium again. The common future tendency of the local labor market is a high labor shortage. Usually, there is a shortage of unskilled labor force in any industry, but this tendency was excluded from analysis due to its obviousness. The highest demand of people will take place in the service industry, which is directly connected

with the oil and gas industry. The most demanded jobs will be health care workers, food workers, teachers, builders, and finance administrative staff (Boisvert & Contreras 2015).

### **4.3 Alberta's oil and gas industry and labor market**

As it was mentioned above, the economy of Alberta province's economy is based on the development of such natural resources as natural gas, conventional oil, coal, minerals and oil sands. There are more than 8 600 companies operate in the resource-producing industry (Rylska & Graebeiel 2003).

There are two main industrial projects that will take place in Alberta: the Mackenzie Valley Pipeline (MVP) and the Alaska Highway Pipeline (AHP). The Mackenzie project will bring to Alberta more than 38 000 of new vacancies every year. The Alaska Highway Pipeline also will bring around 25 000 new vacancies every year. (Rylska & Graebeiel 2003). In addition, gas and oil industry is not only directly expanding and increases the labor market, but also attracting the external investment. All of these factors, directly and indirectly, develop services sector, infrastructure, services incidental to mining, manufacturing, construction, trade, etc. which creates more opportunity for employment of the local population (Rylska & Graebeiel 2003).

As can be seen, such great economic potential requires sufficient human resources' support. According to data of 2014, 110 000 local residents were employed by Alberta's gas and oil labor industry (Chambers 2008). Correspondingly, the level of wages in gas and oil industry should be mentioned. According to an official data of Alberta's government, the average wage per hour in this industry is equal to \$36.02. The difference is especially visible in comparison with other industries. If average salary in the other industries of Alberta is approximate \$74,81400, in gas and oil industry this indicator is 5 000 more (Government of Alberta 2014).

Considering the concept of the employer on Alberta's labor market, within the last decades it was transformed. Corporate structures replaced small independent companies, the process of "consolidation of the employer" occurred. Due to globalization, big companies absorbed small companies, in fact, the number of employers actually declined in Alberta's labor market (Andrew and Sims 2013).

Another tendency of Alberta's gas and oil labor market is Corporate Social Responsibility. Simply speaking it is a tendency among the stakeholders, when companies taking into account social impact, the interests of society, placing the responsibility for the impact of their activities on the company and other actors of the public sphere. In Alberta, the oil sands' company

Syncrude as one of the biggest regional and state employer established a dialogue with indigenous peoples. The company believes that aboriginal participation is vital, that is why the Syncrude created the Native affairs department, aimed at trains, recruits, interacts and contributes to the employment of indigenous people in the company (Andrew & Sims 2013).

The project aimed at implementation of Corporate Social Responsibility in the employment of indigenous people can be evaluated as successful if it helped the indigenous and local community to improve their economic circumstances, develop sustainable jobs for them, etc. “Seeing Indigenous communities as a strategically important market has the greatest impact on corporate actions that will, theoretically, lead to long-term, sustainable entrepreneurial and business development within Indigenous communities” (Camp 2007, p 193).

To summarize, the government of Alberta developed the occupational demand outlook for the period from 2013 to 2017. Analyzing the occupations that belong to the gas and oil industry (supervisors, underground miners, oil and gas drillers, machinery operators, etc.), there is a trend of a small growth of demand (0-0,8 percent), which is below Canada’s average (Government of Alberta 2016b).

#### **4.4 Indigenous population of Alberta**

Alberta is a home of more than 220 000 of indigenous people, which is around 5 percent of the total population of the province. Ancestors of these indigenous people are three main aboriginal groups: First Nations, Inuit, and Métis. From the very beginning, the life of these people was based on the strong connection with the lands: hunting, harvesting, spiritual ceremonies, beliefs, etc. These three indigenous groups have their own cultures with unique features (Anderson & Bone 1995).

First Nations is the biggest indigenous group in Alberta (118 164) and represents 14 percent of all First Nation population of Canada. The term” First Nations” unites various indigenous people with the specific culture, customs, and character. In Alberta, there are 45 First Nations in three treaty areas (Berry and Brink 2004).

Nowadays, First Nations is characterized by a collective approach to economic development, which reflect their specific bonds with land and unique identity. It has three main ideas. Firstly, business creation and ownership are perceived as the ways of control over the economic development process. Secondly, these businesses provide them with competitive long-term benefits in the global economy. Thirdly, in order to create better business performance and

sustainable development, First Nations should participate in alliances and collaborations with other indigenous and non-indigenous partners (Anderson and Bone 1995).

According to the Métis Council, Métis are those people who are separate from the other indigenous peoples, are descendants of Métis nation and self-identify themselves as Métis. Alberta is home for 96 865 Métis people and represents the largest Métis community in Canada (Driben 1985).

At the present time, such traditional activities as agriculture, hunting, and fishing play a significant role in the life of the Métis people. However, in collaboration with new industrial and commercial ventures, it becomes a base for a new mixed economy. Representatives of this indigenous group are also engaged in ranching, logging and energy projects. The Aboriginal policy of Alberta and Canada aimed at the improving legal and political competency of Métis people in order to increase their participation and representation in key political and economic bodies and organizations (Haggarty 2013).

Inuit is an aboriginal community which usually resides on such northern parts of Canada as Northwest territories, Labrador, Nunavut and Northern Quebec. That is why the only small community of Inuit resides in Alberta. Comparing with the other indigenous groups of Alberta, Inuit is the smallest community and mostly represented by the migrant workers, that moved to Edmonton (Kendrick 2013).

Modern wage economy caused some differences in Inuit way of living. Such differences contributed to the provision of modern education, employment, and health. Nowadays their traditional economic activities complemented by employment in gas and oil sector, tourism industry, development of indigenous art. The greatest number of Inuit employed in such spheres as public administration, healthcare, and social assistance (Kendrick 2013).

Despite the diversity, Indigenous population of Alberta has some common cultural, historical and economic characteristics. Traditionally indigenous peoples were engaged in economic activities based on natural resources. After the era of colonization, indigenous people become more economic vulnerable and got the marginalized position in the contemporary labor market and current economic conditions. (Lang et al. 2011).

Indigenous population of Alberta as a part of the labor market is characterized by higher level of unemployment and dominance of working age population comparing with non-indigenous

people of this province. Also, it should be mentioned that the level of education among Inuit, Métis and First Nations of Alberta is lower comparing with the rest part of the population (Government of Alberta 2016a).

There are various approaches to the defining the place of indigenous people in the modern world and market economy. The next section of this paper will offer analysis of indigenous peoples as part of the labor market.

#### **4.5 Indigenous groups and the labor market**

Analyzing official documents, devoted to the human resources processes in aboriginal context, it is possible to say, that there are two main actors/sides of the labor market – indigenous people as potential workers and employers willing to hire them. Both sides pursue their own interests, but pretty often such employment brings benefits both: to employee and employer.

As it was mentioned above, Canadian industrial companies in general and gas and oil companies, in particular, present themselves as socially responsible. As an illustration, one of the aims of employment of indigenous people is to overcome issues produced by the colonization period, residential schools, the banning of Indian ceremonies, etc. Moreover, as a socially responsible industry gas and oil companies follow the goal to develop aboriginal policy in a labor market. That is why they mention in their strategies such specific tasks as creation collaborative relations with indigenous communities to improve employment strategies; creation learning opportunities to improve overall level of education among the indigenous community and facilitate the job search process and employment; promotion positive perception of indigenous people as potential employees in order to overcome the negative stereotypes about indigenous workers (they don't want to work; they don't have experience, they not paying taxes, etc.) (ECO Canada 2016).

However, concerning employers in gas and oil industry, we should not forget that like any business they pursue commercial objectives, primarily to maximize profits. In that case, Aboriginal people are not only workforce but the source of the ethnic diversity. According to the researchers, ethnic diversity leads to the increase of sales and common development of an industry, enhances the reputation of the company in mass media, in society, and in industry. (Government of Canada's workplace opportunity 2014).

Now let's take a closer look at the process of hiring indigenous people into gas and oil industry.

The process of hiring indigenous worker starts from the finding qualified candidates internally (inside the organization) or externally (outside the organization). Certainly, the external search will not be effective without the networking. In order to recruit indigenous worker, the company should “stay in touch” with aboriginal community’s leaders, follow aboriginal mass media, be involved in community activities, work with aboriginal youth (students) and so on. “Companies that were successful in recruiting Aboriginal workers established personal relationships through face-to-face interaction with leaders in Aboriginal communities before beginning recruiting activities” (Government of Saskatchewan 2014, p.19). It needs time to establish strong connections with the indigenous community but it will bring the opportunity to find unique specialists and develop required conditions for working with indigenous people. (Government of Saskatchewan 2014). Australian employment strategy kit advice to attract indigenous people that already works in a company to a vacancy advertising process. It will create the image of trust (Common wealth of Australia 2011).

The next phase is the selection process. Canada’s Aboriginal recruitment guide highlights, that indigenous employee has his own specific features and requires specific treatment and evaluation. For example, an indigenous candidate can have a not perfectly created resume, but it does not reflect his real professional skills, it's just evidenced about the lack of resume-making experience. It is recommended to pay more attention to the interview rather than to resume assessment. The interview should take into account aboriginal cultural features. For example, in aboriginal oral practices, the silence is a moment to think and reflect rather than an awkward pause that should be filled. In Australia, the pre-interview phase is a common practice. Companies invite Indigenous for the training, where they see how the interview process will go and what to expect (Common wealth of Australia 2011).

The final phase of the employment process is induction. Corporative culture and everyday working routine can differ from the routine of an indigenous person. Integration is an important part of employment that helps an indigenous person get used to and adapt to new conditions and environment. Companies that represent gas and oil industry of Canada have a special position in HR department, that assist new indigenous worker to insight into the company's business and to master the upcoming challenges (Common wealth of Australia 2011).

Turning from theory to the real situation, let’s discuss specific features of aboriginal employment that took place in gas and oil companies of Alberta today. The partnership is a keyword describing Canadian local and state policy concerning the employment of indigenous

peoples in gas and oil companies. Vocational training centers are the result of the state policy aimed at the increasing the aboriginal participation in wage labor economy. It should be mentioned, that the most of the mining jobs are considered as (semi) skilled. In Alberta Department of Indian and Northern Affairs and the Syncrude company created on-the-job training programs aimed at the employment of Indigenous peoples. According to the local labor pool analyses 2/3 of respondents want to occupy skilled technician or trades vacancies, however, only 13 percent have these jobs. The main reason is a lack of required skills and education (Hodgkins 2016).

However, Hodgkins mentions that in real life sometimes such cooperation follows only one aim - to create a positive image of gas and oil industry in society and mass media, ignoring real needs of the indigenous community. These “mistakes” in current policy leads to the opposite, negative results, exacerbating indigenous people’s labor issues (Hodgkins 2016).

As an illustration, let’s have a quick look at the current statistics of indigenous employment in gas and oil industry of Alberta. The indigenous workforce in Alberta is mostly presented by youth. More than a half of indigenous employees (58 percent) are in the working age 24-58 years old. Most of these workers reside in Edmonton and Calgary (58,6 percent), the place of concentration of gas and oil companies in Alberta. However, the participation of indigenous peoples in local workforce is lower comparing with non-indigenous people (Government of Alberta 2015a). The level of unemployment among the aboriginals is three times higher than among the non-indigenous peoples. “In 2013, the provincial unemployment rate stood at 4.6 percent, while the Aboriginal rate was 3.6 percentage points higher at 8.2 percent” (Boisvert & Contreras 2015, p. 25). It should be mentioned, that among indigenous people, First Nations’ unemployment rate is higher, than Metis’ unemployment rate (Boisvert & Contreras 2015).

Summarizing the main trends concerning indigenous people’ employment on Alberta’s gas and oil labor market, there are some positive results. As shown above, the way of hiring indigenous people is based on a common scheme of employment, but aboriginal workers considered as “non-traditional” and receive a special treatment. Such specific attitude aimed at the development of the equality between indigenous and non-indigenous workers in gas and oil labor market. On the other hand, statistical data shows that in reality, such measures do not work so well as it depicted on the paper. Firstly, while the level of education among the aboriginal people in Alberta is quite high, they still experience a lack of skills and qualification for occupying more vacancies in gas and oil industry. Secondly, racism, discrimination, and

negative stereotypes create an additional barrier to the employment of indigenous workers. Despite the existing legislation equalizing the rights of indigenous and non-indigenous peoples, the impact of negative stereotypes is very strong. Thirdly, indigenous communities suffer from the lack of transport infrastructure which can connect their residences and workplaces (Government of Alberta 2010a).

#### **4.6 Indigenous groups and oil and gas industry**

This part of the paper will be devoted to the discussion relationships between indigenous peoples of Alberta and oil and gas industry. Aboriginal employment will be presented as one of the faces of these relations.

A significant event in the history of Indigenous people of Alberta was signing Treaty 8 agreement. Briefly speaking, this agreement between Queen Victoria and First Nations of the Lesser Slave Lake area covers the areas of Northern Alberta, Northwestern Saskatchewan, Northeastern British Columbia, and the Southwest portion of the Northwest Territories. The main idea of this agreement was to establish relationships between aboriginal population and the State under the guidance of respect, honesty, and acceptance. This agreement provided indigenous peoples with rights to land and natural resources for the implementation aboriginal way of living, protection them from the foreigners, free education, and health care. However, in today's realities, this agreement does not work properly for the benefit of aboriginal people (Alberta Online Encyclopedia 2009).

In Northern Alberta, Oil Sands extraction area is located on indigenous territory. This industrial process is accompanied by a large use of water and as a result waste products pollute the water. In addition to water, animals, plants, the atmosphere, the soil and the environment, in general, suffer from the pollution (Huseman and Short 2012).

As it was mentioned earlier, Indigenous peoples have a vital connection with lands and natural resources. Oil tar sands production destroys the aboriginal natural environment, which leads to the demolition of their social and cultural environment. Huseman and Short call this process social genocide, “‘intent to destroy’ – occurring, for instance, through sporadic and uncoordinated action or as a by - product of an incompatible expansionist economic system” (Huseman and Short 2012, p. 222). It should be mentioned, that such industrial activities have a negative impact on the health of indigenous peoples and cause such deadly diseases such as leukemia, lymphoma, cancer, etc.

This deplorable information is ignored by state experts. Oil tar sands production is, directly and indirectly, threatening the cultural survival of indigenous peoples and violates the main principle of Treaty 8 about protection of aboriginal territories from the uncontrolled industrial impact (Parlee 2015).

In debates about the influence of oil sand's extraction on First Nations and Métis people, there is an opinion, that the negative consequences can be compensated by the vast economic benefits for the Canada, Alberta, and indigenous population. However, the profit is mostly captured provincially and federally. Also, it should be mentioned, that the negative impact on indigenous people can vary, for example, indigenous communities, that resides downstream are affected to a greater extent. In the province with one of the largest economic potential in the world, indigenous people's standard of living is one of the lowest in Canada. Pretty often indigenous interests are ignored by both the government and the gas and oil companies. There is some evidence in the legislative base (Parlee 2015). "According to the Natural Resources Transfer Agreement, only the Alberta government has a legal right of ownership and management of provincial lands and resources" (Parlee 2015, p.430).

However, Métis and First Nations through the court decisions got the opportunity to earn compensation from petroleum exploration and development on their traditional lands. It should be mentioned that these payments don't guarantee the sustainable economic development for the aboriginal people. Indigenous communities of Alberta are characterized by mixed economy, that is a combination of formal and informal economic systems. The government of Canada strongly believes that employment of indigenous people in gas and oil industry is a possible way of improving economic conditions of indigenous people. In fact, such employment can initiate short-term cash benefits and long-term negative side effects. The latter refers to the brain and skill drain from the other sectors of the economy. The need for unskilled labor force reduces the education tendency among the local population (Parlee 2015). "As such the unemployment rate may not decline as employment in the petroleum sector increases, but communities may be facing shortages in skilled and knowledgeable workers in key areas of the local economy" (Parlee 2015, p. 432).

"The Enbridge Northern Gateway Project" is a construction of the big pipeline for transportation of tar sands from Edmonton, Alberta to Kitimat, British Columbia through the indigenous territories. Carrier Sekani people were totally against this project and conducted various protest actions. According to aboriginal people, development of this project is

accompanied by such decision-making process as the way of blatant exclusion of indigenous peoples from resource management decisions and way of following the colonial power relations. And if the official web page of this project calls it “exciting opportunity for northern British Columbia and Alberta”, local aboriginal communities perceive it as a threat to the sustainability of the indigenous way of living (McCreary & Milligan 2014).

In the neighboring province of Alberta - British Columbia, shale gas deposits located on the First Nations Territories. Northwest territories of British Columbia are also under the protection of “Treaty 8”. The availability of natural resources there leads to the development of mining infrastructure on the indigenous lands. Certainly, the indigenous population can indirectly cause the business risks for project’s implementation. Aboriginal resistance in any manifestation forms an image that local governments cannot come to the agreement with indigenous communities before approving the development. “Weakness of the indigenous people’s voice” in the decision-making process concerning the implementation of gas and oil projects is compensated by the power of resistance. In this case, indigenous people is presented as an obstacle to obtaining benefits from natural resources. Government support industry’s position rather than indigenous, “government representatives were unwilling to impose any costs on a company, even in a case where more information was needed to protect areas of cultural significance” (Garvie & Shaw 2015, p.1014). According to the constitution, needs of indigenous peoples have to stand above the economic profit, but in fact, it is all the way around.

Brief observation of relationships between indigenous communities and gas and oil industry in Alberta allow us to call it “confrontation” rather than “cooperation”. D. Brown defined colonial actions as tactic which leads to the food shortages, destabilization of traditional self-government, damaging the natural resources and environment, widespread of diseases, the flooding and relocation the people, destroying the indigenous migration cycle and resource base (Brown 2002). The consequences of the development of oil and gas industry for indigenous peoples of Alberta have common features with colonization, described by D. Brown. The perception of the oil and gas industry by Alberta aboriginal population could not be titled as a positive. Accordingly, this industry cannot be considered as a potential desired scope of employment of indigenous peoples.

#### **4.7 Discussion**

Following the structure of labor market analyses offered by the chosen theoretical framework, I have described main features of the local gas and oil labor market of Alberta. As it was

mentioned earlier, I “divided” broad category of the local community of Alberta into two groups the indigenous and non-indigenous parts. Following such approach in the discussion, firstly, I will answer the research questions on the example of a general local community of Alberta. Secondly, I will pay special attention to the position of the indigenous people towards gas and oil labor market of Alberta.

Evaluating the local labor market by the employer representing the oil and gas sector, Alberta has sufficient amount of local population ready and willing to work. Such potential workforce is quite young, but there is a tendency to aging. With attention to “the Self-concept theory” of D. Super, the potential local labor force is basically completed the exploration stage of career development and ready to start the phase of establishment (Betz 1994). In other words, the local labor force can be characterized as a “mature” and ready to make a conscious career choice. Indeed, the local population is well educated, almost half of workforce has university’s diploma. Alberta’s labor force has sufficient amount of human capital, embodied in the ability to perform labor so as to produce economic value (Becker 1993).

To put it differently, from the position of local representative, Alberta’s gas and oil industry has a great capacity for the local population employment. Within last decades there is a tendency to increase the need for highly skilled workers. The possibility of women's employment is developing also. In particular, the aggregate labor demand has a great capacity (Oreopoulos 2004). To demonstrate, the wages in the gas and oil sector is considerably higher than the average in the province. Such industry, directly and indirectly, develops related industries which lead to an overall increase of jobs in the region.

However, the local labor market policy follows the goal to stimulate inter-provincial and international migration flows, which intensifies the competition in the labor market. Due to the trend of “merging of the business”, the actual number of companies decreases, multinational corporations pursue their goals, which reduces the possibility of employment of the local population (Andrew & Sims 2013). Another negative tendency is a presence of discriminatory and racist attitudes in everyday and working life of Alberta’s society, which can lead to the marginalization and loss of the position in the labor market of the local labor force (MacIsaac & Patrinos 1995).

In view of the foregoing, I would say that the local communities and gas and oil industry in Alberta can meet each other’s needs. The employer needs sufficient amount of people ready

and willing to work, mostly at a young age, with education or professional skills. Also, it is desirable that the potential worker will be local. Conversely, the local employee needs a stable job in well-developed industry with sufficient wage. As shown above, gas and oil industry has successfully developing labor market with a large variety of professions.

All things considered, the conducted research makes possible to identify the main factors that have an influence on accordance of the needs of local Alberta's labor force and gas and oil industry. In essence, it is mostly the merit of the existing legislation, national and regional policies concerning local and indigenous people's employment. Provincial and state authorities are highly interested in the employment of local community. They want not only to solve the problem of unemployment, but also to prevent poverty, reduce the level of crime and social inequality. Moreover, such actions maintain a sufficient standard of living and the general wellbeing of the province. For the local gas and oil industry, it is a way of implementation of the corporate social responsibility of business, creating a good image in society, mass media, etc. To sum up, local (non-indigenous) Alberta's employees are highly relevant for gas and oil industry and these companies and communities collaborate.

The conducted document analysis allows us to form a fairly complete picture of modern relationships of indigenous peoples and gas and oil industry of Alberta. Indigenous perception of this industry is expressed by capacious metaphors: social genocide, reckless biological war as direct and indirect measures aimed at taking away indigenous lands to get an economic profit; resource course policy as a way of destruction environment. Explaining this fact by the theory R. Dawis and L. Lofquist, there is a mismatch between employer's environment and employee's expectations. Such negative perception of the gas and oil industry by indigenous peoples indicates that goals and work environment of gas and oil companies odd the personality's type of indigenous people (Dawis and Lofquist 1964).

Indigenous population of Alberta perceives the gas and oil projects as an impetus of exclusion of Indigenous peoples from resource management and decision-making process. This industry does not treat aboriginal people as an equal partner, but treat them as an obstacle on the way of getting natural resources. Indeed, the employment of indigenous people into gas and oil industry can lead to the slowdown of regional and indigenous economic growth. In this case, the indigenous population has all of the features of a marginalized group, specifically, they are socially excluded and their needs are ignored by the gas and oil industry (Power & Wilson 2000). The discussed articles have a general idea that Alberta's oil and gas policy today is a

new form of colonization. Local indigenous peoples occupy a boundary position between two “conflicting cultures” indigenous and industrial (Park 1928).

As can be seen, gas and oil industry of Alberta can't meet needs of indigenous population through the employment and even contradicts them. Under this circumstance, local (indigenous) Alberta's communities and gas and oil industry are not relevant for each other, accordingly, labor collaboration is not possible.

All things considered, gas and oil industry of Alberta can meet only the needs of non-indigenous part of the local labor force. At the present time, “Matching” between indigenous employee and the industrial employer is the issue, which did not receive a solution in the context of the existing national and regional employment policy, the actions of oil and gas companies, socio-economic and cultural-ethnic features of this region. Revision of the gas and oil companies' position towards the indigenous population and prioritizing the needs of indigenous peoples over the economic benefits can change the situation in foreseeable future. Such measures can create specific conditions for negotiations and collaboration.

## **Chapter 5. Norwegian case**

### **5.1 Introduction to the target area**

Norway is a Northern European country, which is located on the Scandinavian Peninsula. Nowadays, the population of Norway is 5 258 317 people. The density of population is quite high and equals the 14,6 people per square kilometer (Statistics Norway 2017). Norway has a market economy, the main activities are connected with an abundance of such natural resources as seafood, lumber, minerals, oil and natural gas. Gas and oil industry account for approximately 25 percent of Norway's gross domestic product (Nilsen 2016).

Finnmark is the most Northern county of Norway. Its territory is vast and equals 46 000 square kilometers. However, the density of population is only 1,6 people per square kilometer (Nilsen 2016). For a long time, the Northern part of Norway was disadvantaged in a socio-economic sense. Remote poor populated territories located beyond the Arctic circle with harsh climate conditions were a peripheral part of Norway. Despite the rich deposits of natural resources, the region was quite poor due to that fact, that these resources were extracted and developed by Southern companies located far from the North. However, the innovative approach of the government and newly discovered resource potential changed the status of this area dramatically (Nilsen 2016).

Hammerfest is the “gas and oil capital” of Finnmark, most of the industrial activities, connected with the extraction and production gas and oil products took place here. It is a small town with 10 500 of inhabitants. 11,5 percent of the population are employed in gas and oil industry (directly with oil and gas and in petroleum-related jobs). Before the exploration of natural deposits, the economy of this region was mostly based on fishery and some tourism. The decline in fishery activities in 1980-90s caused socioeconomic challenges such as depopulation, outmigration, unemployment, depression on the real estate market, etc. (Loe and Kelman 2016). Creation of the new industry became not only the economic perspective for the Hammerfest but the opportunity for sustainable social development for the whole Finnmark county. “The future came back to Northern Norway” (Loe and Kelman 2016, p. 28). Property tax from the gas industry provides the municipality with the 157 million NOK every year.

### **5.2 Social and employment trends of the labor market**

Norway has one of the highest levels of fertility in Europe (1,71 child), in Finnmark, this indicator is even higher and equals 1,74. The average life expectancy in Norway is 81,45 years. However, “Finnmark has the lowest life expectancy of any of the twenty Norwegian regions, it is 2.1 years below the national average for males and 1.3 for females” (Heleniak and Bogoyavlensky 2014, p.63). Concerning the gender characteristics of the local population, the number of men prevails on the number of women. The median age of Finnmark’s population is slightly lower comparing the rest part of Norway (Heleniak and Bogoyavlensky 2014).

Analyzing the sex-age pyramid of the Finnmark, the biggest local population group is presented by the people in the age range of 20-39 years, followed by a group aged 40-54 years. As a matter of fact, the overwhelming majority of the local population is in the working age. It also means that the amount of labor force will increase in the foreseeable future (Nilssen and Lie 2012).

Another significant characteristic of the population is a level of education. In Finnmark, the number of people with completed higher education has increased significantly over the period from 1980 to 2010. More than 20 percent of the local population have the completed higher education. The level of education among the women is higher than among the men. However, professional skills of Finnmark’s labor force are mostly orientated to meet the needs of the public sphere rather than the industrial one (Nilssen and Lie 2012).

Some of the jobs possess specific requirements, especially concerning the gas and oil industry. According to a NAV report, one of the most important requirement is to have a specific

education. “Relevant higher education for this sector is typically an engineering degree (3-5 years) in petroleum technology, geology/geophysics, drilling, reservoir, mechanics and design, structural engineering, automation, and instrumentation, or similar degrees” (NAV 2016, p.2). According to NAV reports, the Norwegian gas and oil industry is experiencing labor shortage. This tendency is especially visible among the engineers and IT specialists’ vacancies. One of the reasons for the current situation is the particular structure and character of Norwegian education system. Pretty often due to the high level of “freedom” students drop off the “difficult” courses connected with technical and mathematical disciplines and choose creative and humanitarian courses instead (NAV 2016).

The second group of requirements is connected with the language competency. Due to safety reasons, the employees of gas and oil industry should speak English and Norwegian. Another significant requirement for the potential employee is the completion of safety and emergency courses and “perfect physical shape”. For this reason, general medical requirements play a significant role in choosing the employee. To satisfy the general health demands the applicant’s health must meet the requirements of visual acuity, cardiovascular system, brain and lung function, mental health (Norwegian Directorate of Health 2012).

Statistics of Norway present the information about health, long-term illnesses and diseases in a generalized form for the entire northern Norway (Finnmark, Troms, Nordland), despite this fact, the data are relevant for assessing the health status of the potential workforce specifically in Finnmark. In general people in working age are characterized by a good health: 90 percent of people in the age 16-24 years possess good health; among the next age category 25-44 this indicator is 10 percent less; finally, only 60 percent of people of pre-retirement age (45-66 years) have a good health. In particular, 21 percent of the people in pre-retirement have health problems that bother them in everyday life. In essence, the local labor force is quite healthy and does not possess diseases that severely restrict their work activities (Statistics Norway 2017).

Analyzing the existing structure of the workforce in Finnmark, it should be mentioned, that the majority of employees of local enterprises are representatives of the local population (81.7 percent) (Nilssen and Lie 2012). The level of unemployment in Finnmark equals 4,5 percent, which is one percent higher than overall Norwegian indicator (Norlen 2016). As a result of resource orientation of the Finnmark’s economy, world prices for gas and oil affect the labor market. For this reason, since 2015 the unemployment rate continued to increase.

However, gas and oil industry requires a big amount of workforce with different professional skills and qualifications. Therefore, youth got the reason to stay in their hometown. Moreover, gas and oil industry attracted a workforce to Finnmark from the other parts of Norway and even from the other countries. As an illustration, in-migration prevails over out-migration. In 2011, 3006 people left the region, 3248 people has arrived. The most intensive migration flow is observed in the age group of 20-29 years. Which is also creates a good potential for the development of the local labor market (Statistics Norway 2011). Increasing of immigrations flows is a common trend almost for all regions of Norway, Finnmark is not an exception. The largest groups of migrants come from Nordic countries (30,5 percent), Eastern Europe (30,5 percent) and Asia (18,4 percent) (Statistics Norway 2008).

Another consequence of the gas and oil industry's development is indirect improving the living standards. In Finnmark, the average level of income after payment of taxes per person is equal 318 000 NOK. The approximate growth is 3.6 percent per year, which is 0.3 higher than the national average (Statistics Norway 2013). In Hammerfest, the average salary in gas and oil industry before taxes equals 66,900 NOK per month. In comparison, the average salary in Hammerfest in the municipal or health care services is twice smaller than in resource production (37 300 NOK per month). Consequently, people who are not employed in this industry experienced increased costs of living and general economic inequality. As a result, the society is changing. The level of crime and drug use have increased. Hammerfest got a status of a place "to make money", rather than the place to live (Loe and Kelman 2016).

As it was mentioned earlier, Norwegian government see the oil and gas development in Finnmark as a main source and driver of regional social and economic development. Gas and oil industry already have a great positive impact on the employment rate. This industry creates more new jobs than other types of business. Today, more than 150 000 of people are employed in gas and oil industry in Norway. In addition to the exact operation connected with the extraction of the natural resources, it requires service industry, social care sector and so on. Taking this fact into account, gas and oil industry provided 250 000 jobs in Norway (Tormodsgard 2014). Current governmental projects aimed at using such practice in Northern part of Norway regionally and in the Hammerfest area locally (Tormodsgard 2014). According to the data, obtained by the interview by Loe and Kelman, local population wants to be engaged in gas and oil industry and ready to use local job opportunities. "The most important is to hire

local people so there are more job opportunities here so that one is able to keep people here” (Loe and Kelman 2016, p. 29).

However, according to an alternative point of view, presented by Tormodsgard, the development of gas and oil industry will have more negative, than positive effect. It will create new threats to the environment, the fishing industry, etc. As for jobs, Goliat and Snøhvit will create no more than 4 000 jobs, most of which will be occupied by people from the Southern and central parts of Norway, working on a rotational basis (Tormodsgard 2014). As an illustration, official Norwegian statistics indicate, that gas and oil industry provides 63 000 people with the job, which means that 2,3 percent of the total labor force are employed in this sphere. However, 65 percent of this labor force resides in Rogaland and Hordaland in the Southern part of Norway, not the Northern one. Correspondingly, Southern Norway meet the significant growth in gas and oil labor market, in Northern Norway, this tendency applies mainly to Hammerfest (Norwegian ministry of petroleum and energy 2011).

### **5.3 Norwegian (Finnmark’s) oil and gas industry and labor market**

Nowadays “the petroleum industry is Norway’s largest industry measured in value creation, state revenues and export value” (Tormodsgard 2014, p.12). According to the Norwegian petroleum directorate, Barents Sea contains approximately 35 percent of undiscovered deposits of oil and gas in Norway (Norwegian ministry of petroleum and energy 2011). At the present time, Snøhvit is the biggest gas field in the Barents Sea, which came on stream in 2007. Gas extracted there is transported via pipeline to Melkøya ( an island in the Hammerfest, Finnmark) for further production and transportation.

At the same time, the activity connected with the already explored deposits of oil and gas will significantly decline to 2020. For one thing, approximately 30 facilities on the Norwegian Shelf will be taken out of use within the period 2010-2020 (Norwegian ministry of petroleum and energy 2011). On the one hand, it will lead to the reducing of the labor demand, on the other hand, it will be an impetus for exploring and development of the new deposits which will require a new workforce of different types. Preventing and minimizing negative trend requires new explorations, which are taking place in the Barents Sea now. Indeed, “The authorities play an important role as facilitator, and in certain areas where the industry’s efforts are not sufficient, there is a need for public funds” (Norwegian ministry of petroleum and energy 2011, p.135). As an illustration, according to the annual report of the Norsk Olje & Gas organization, despite the fact that since 2014 various industries experienced a decline in financing and

development, gas and oil industry is an exception. “2014 will nevertheless be at the third highest level in history” (The Norwegian Oil and Gas Association 2014, p.11). In this context, there is only a danger that the oil and gas industry may lose its reputation as a place for sustainable employment among the young people. Therefore, nowadays task of oil and gas companies in the Northern Norway is the development of cooperation with young people. Sciences teachers and student advisors are a new target group of vocational guidance companies organized by gas and oil companies. The interest of the potential employees is rising every year. However, the number of applications for these programs is still low and a number of dropouts are still high (The Norwegian Oil and Gas Association 2014).

Northern Norway is a peripheral region because there are only two cities with the amount of population bigger than 35 000 people located there (Bodø and Tromsø). Albeit the presence of rich natural deposits, the production takes place outside these towns. Approximately 30 years ago the ideas about using of the oil and gas potential for the benefit of the regional development was initiated. “The encounter between the oil industry and a peripheral region is characterized by imported technology to the region, and a striking imbalance between the existing business structure and population and the oil companies’ operations” (Nilsen and Karlstad 2016, p.48)

The orientation of the gas and oil industry towards the local community can be expressed in the form of the corporate social responsibility. Norwegian ministry of foreign affairs defined this concept as the prevalence of human interests over corporate and economic interests (Vaaland and Heide 2008). Corporate social responsibility in the context of the labor market means the active cooperation of gas and oil industry with the local and regional companies to facilitate the employment of local population. Analyzing the Statoil strategy, it should be mentioned, from the company’s point of view such employment leads to the enterprise development, forming good reputation of the business and expanding the access to the new resources. In essence, from the position of the local community, such employment leads to the increasing of labor intensity, forming new skill requirements among the local labor force and stimulation of their education (Vaaland & Heide 2008). As an illustration, Statoil within Snøhvit project and Eni Norge within Goliat project actively develops and sponsors education in high schools (Nilsen 2016). Shell have various programs and initiatives aimed at supporting direct local employment and development collaboration with local companies to offer indirect employment in the industry. “Shell LiveWIRE” is one of the biggest initiatives aimed at inspiring, teaching and employing local young people in the energy industry. The company provides young scientists with the

grants to support scientific initiatives connected with the smarter use of natural resources, shaping a sustainable energy future and so on (Nilsen 2016).

Initially, Norwegian gas and oil industry imported technologies from abroad that required an experienced staff to serve this industrial sector. That is why the significant amount of labor force was imported also. Nowadays the adaptation of these technologies to regional socioeconomic, demographic and climate conditions is in focus. The industry is highly interested in the employment of local people that will meet the current demand of the labor market (Norwegian ministry of petroleum and energy 2011). Within such tendencies, regional firms faced the challenge of competition from large international corporations (both oil and gas companies and related service industries). Development of regional strategy by local and state government became the solution for this challenge. Employment of the local population has become more economically profitable. It is much easier to fill the vacancies with the local workforce involving local companies. Moreover, local companies started to create alliances with Multinational Corporations which is also facilitated to the employment of local population. In this case, the recruitment process plays a significant role in a realization of these regional development strategies (Norwegian ministry of petroleum and energy 2011).

Norwegian legislation system, especially the employment law regulates the process of recruitment. In general, the employer's choice is not restricted by the state laws, however, the potential employee is under the protection of the discrimination laws. Like in Canada, the potential employee could not be discriminated because of the age, gender, political views, membership in a trade union, etc. (Directorate of Labour Inspection 2016). To demonstrate the way of recruiting in gas and oil industry of Norway and Finnmark, the search of the engineers and IT specialists mostly took place on the internet. Recruitment companies mention, that LinkedIn is their main instrument to find the exact candidate for the vacancy. Also, they actively practice "internal search" for the employees. After the announcement of the vacancy, they are searching for an employee within (inside) the company but in foreign branches. The vacancy is often filled by the relocation of an already hired and experienced employee. Another key point is brand recognition and size of the company, which plays a special role in the process of recruitment. Big gas and oil companies like Statoil are world famous and don't need an advertisement because the potential employees send hundreds of applications for vacancies themselves. Frequently, the employer has a large selection of candidates, therefore workers face high competition (Riemsdijk & Cook 2013).

Unlike the big world famous gas and oil companies, small local companies of Finnmark have to conduct more advertisement activities to attract the employees. Recruitment agencies have a power to find exact personnel in a limited amount of time, however using their service is more expensive than recruitment directly by the gas and oil company. “The local recruitment agents possess valuable local and national knowledge. They know about the national education system and the value of university degrees, they know how to advertise an event locally and nationally, and they can tell if a reference is legitimate” (Riemsdijk & Cook 2013, p. 24).

Recruitment agencies mention that there is the vast supply of foreign skilled labor force, although the main problem is language competence and cultural differences. In essence, the local labor force has a competitive advantage. To attract the local labor force, including graduating students, gas and oil companies are conducting job fairs and industry conferences. For one thing, within Barents Sea Conference, key players of the oil and gas industry of Norway have the opportunity to present their activities to potential employees from the local population (Riemsdijk & Cook 2013).

Frank and Fisher describe the mechanism of attracting the employees from the local population, especially graduating students. Each company follows their own recruiting plan, but in general, their activities include six main steps: cultivating campus presence, assessing staffing needs, interviewing candidates on campus, conducting office interviews, evaluating the candidates and hiring the best. In this case, job advertisement program is constructed as a marketing plan aimed at the students (Frank & Fisher 1989). For example, the gas and oil companies organize or sponsor events, within which they can communicate with the students. This is a common method that actively used by Statoil and Shell in Norway. These companies offer the variety of student’s internships and collaborative research projects. “The Norwegian University of Science and Technology (NTNU) and Statoil signed an agreement on a long-term research and education collaboration that will bring the university as much as NOK 310 million over the next eight years” (Norwegian University of Science and Technology 2013).

At the present time, Norwegian gas and oil companies make choices in favor of outsourcing of the recruitment procedures, this applies to both small and big companies. As an illustration, since 2013 Statoil abolished its own department for human resources management and signed a contract with two companies: Alexander Mann Solutions for HR recruitment and Zalaris for HR management services (Isaksen 2014). However, the outsourcing tendency includes not only HR department but also other departments of the company. According to the Statoil plan, 350

jobs by 2015 and up to 1000 positions by 2020 will be outsourced. Therefore, employees occupying these vacancies (these are predominantly managers) will lose their jobs, since it is much cheaper to place these departments outside of Norway (Haugan 2013).

#### **5.4 Indigenous population of Finnmark**

Sami is the only one indigenous people in the Northern part of Norway and especially in Finnmark. Due to the absence of the overall registration of the Sami population, it is quite difficult to present the accurate statistics on this indigenous people. According to the official statistics, the total population of Sami in Norway is between 37 890 – 60 000 (Statistics Norway 2014). Sami people historically were well adapted to the severe climatic conditions of the High North. Such conditions shaped their traditional way of living. From immemorial times the economy of coastal Sami was directly connected with salt-water fishing activities and reindeer husbandry, hunting and farming. Such economic activities brought income not only in the form of direct food products and clothing but also financial flow due to trade in subsistence goods (Statistics Norway 2014).

The traditional way of living still plays a significant role in Sami livelihood. As a result, reindeer herding is under the special attention of the Norwegian legislation. “According to the Reindeer Herding act, the Reindeer husbandry in Norway must be economical, ecologically and culturally viable and it will be based on Sámi culture, Sámi traditions and Sámi customary practices” (Reindeer Herding 2017). For example, the reindeers have to belong to a Siida. Siida was a part of traditional Sami society. In a modern context, this term means “a group of herders with their families, who tend their reindeer together, work together, and move together” (Freeman 2000, p. 22). At the same time, Sami people is fully integrated into the modern market economy today. This tendency explains vast migration flows of Sami population from traditional areas to the urban centers.

Hydroelectric development, farming, mining, tourism and other industries competing with Sami for land resources. These industries mostly aimed at the meeting of the needs of the non-indigenous population. It creates a potential threat to the sustainable development of this indigenous people in general, and reindeer herding in particular (Freeman 2000).

Considering the main demographic characteristics of the Sami population in Norway, it should be mentioned, that Norwegian Bureau of Statistics presents Sami statistics in the settlement areas North of the Saltfjellet mountain range. This geographic area includes partly Nordland, Finnmark, and Troms counties. However, Finnmark territory occupies the majority of this area,

that's why the use of these generalized data for accessing the Sami issues in Finnmark is appropriate within this project (Statistics Norway 2014).

Analyzing the sex and age pyramid of this region, the average age of the indigenous population is higher than the national average. Most of the indigenous people living here are in the age group of 55 years and older. This fact is explained by the high level of outmigration (especially youth). In recent years the tendency of decreasing the amount of indigenous population has reduced. In comparison with other indigenous people of the Circumpolar area, Sami people are characterized by the higher health indicators. As an illustration, the life expectancy of this people is approximately equal to the life expectancy of the non-indigenous population of Finnmark. Fertility rate here is higher than average Norwegian indicator. The level of education among the Sami people is lower in comparison to the non-indigenous population. Most of the Sami people have only basic school education (Hansen 2015).

As it was mentioned earlier, the employment rate is an important feature of the labor market analysis. The employment rate among the indigenous population of Finnmark equals 65 percent and is lower than in the Norway as a whole (69 percent). Considering specifically the spheres of employment of Sami people, most of the men are employed in agriculture, forestry and fishing industry. It represents the highest rates for these industries in the whole Norway. Other spheres of Sami men employment include trade, hospitality and construction industries. Women are mostly employed in health and social services spheres (Statistics Norway 2014). In essence, Sami people prefer to work "within modern urban lifestyle" rather than traditional, due to globalization and expansion of the modern market economy. As a result, only 10 percent of Sami youth prefer "traditional occupation" (Advameg 2017).

Another key point concerning the indigenous population is the level of ethnic discrimination. In spite of the absence of the official statistical data about discrimination of the Sami people in Norway, Sami investigations report that the level of ethnic discrimination on the labor market and other areas of social life is still quite high. On the one hand, the discrimination exists in the indirect forms. The Norwegian education system does not pay special attention to the strengthening the Sami children's identity and the quality of teaching the Sami language at schools. Other examples are the reduction of state support for financial Sami projects, particularly music festival "Riddu Riddu", legal assistance to the Sami people in Finnmark, the shutdown of the southern Sami school in central Norway). On the hand, discrimination appears in direct forms, when people express their disrespect for the Sami. In 2016 in Sami national day

the leader of the Norwegian progressive party Ulf Leirstein published an insulting post about the Sami on Twitter. (NEWSinENGLISH.no 2016). Hansen sees the roots of this tendency in colonization epoch of “Norwegization” policy (Hansen 2015).

It should be mentioned, that the Norwegian labor market in general and Finnmark’s oil and gas industry, in particular, does not have any specific documents connected with the specific recruitment procedures of the indigenous peoples. For this reason, unlike the Canadian case, I will skip the corresponding section of the analysis.

### **5.5 Indigenous groups and oil and gas industry**

At the present time, the interest of gas and oil corporations in the indigenous lands is significantly increased worldwide. In essence, these lands contain many unexplored natural resources. This trend is also presented in Norway (Hansen & Midtgard 2008).

In “Sami context” natural resources can be divided into two categories. Firstly, there are traditional resources for indigenous people. Exploration and use of these resources are an essence of the indigenous way of living. For one thing, fish and farming resources belong to traditional indigenous resources. The second type of the natural resources is such resources that were not previously used by the Sami people and located on their traditional territories. For example, oil and gas deposits are located on traditional Sami areas in Finnmark. Exploration of these resources can bring the threat for indigenous people, that is why International and Norwegian laws regulate exploration and development of these resources (Hansen & Midtgard 2008).

The issue of assessing Sami position towards the gas and oil industry is quite challenging. The main issue that the opinion of Sami people could not be characterized as homogenous. Some representatives of this people evaluate the situation as a pressure and new wave of Norwegian colonization, others claimed their positive attitude to this process and define themselves as Norwegians with Sami ethnic culture (Hansen & Midtgard 2008).

The Finnmark act, that was mentioned above, proclaims the devolution of the land rights from state to regional level. “The Finnmark Act formally recognizes that Sami communities and individuals and others, through long use of land and water, have acquired rights to land and natural resources in Finnmark and sets in motion a process for identifying and recognizing existing rights of use and ownership” (Tauli-Corpuz 2016, p.19). However, there is a common opinion among the Sami people, that there is a lack of legislation base in Norway aimed at

protection of Sami rights in “confrontation” with gas and oil companies. As an illustration, Norwegian “Planning and Building Act (2008)” regulates all of the construction projects concerning gas and oil industry. According to it, Sami people have a right to express their opinion about any plan, however, they do not have the right to make a decision. Also, it protects the Sami rights only on the limited territory, not on the all traditional Sami areas in Norway (Planning and Building Act (2008)). The Mineral Act also does not protect all of the Sami homelands. Another key point is the low development of mechanisms of benefit sharing for the local indigenous communities (Hoag 2016).

In addition to the national and regional legislations, international conventions also regulate the “relationships” between Sami and industrial sector. Since the ILO Convention 169 was ratified by Norway, there is a legal obligation to consult with the indigenous groups. At the present time, such dialogue really exists. Of course, there are some nuances that need improvement, but this is a good example of creating a stable communication between the indigenous people and the authorities (Hoag 2016).

Aili Keskitalo, the leader of Sami parliament of Norway expresses the position of the Saami as a desire for a balanced future for the Arctic. With this in mind, Sami did not want the state to place the economic interests above the human interests. In general Sami are not against the oil and gas activities and understand its financial importance for the Norwegian economy, however, if the exploration takes place on the indigenous territories, Sami should have a right to decide who and in what volumes will conduct industrial activities in their territories (Hoag 2016). Specifically, the Sami people want the Sami Parliament to get a veto right over the resolution of the oil and gas activities in any Sami area (Vermees 2013). In essence, Sami people actively support the development of joint decision-making right process rather than generally opposing the industry.

At the present time, one of the topical challenge concerning the position of Sami people towards gas and oil industry in Norway is - should the Sami people get direct income from gas and oil industrial activities that took place on their territories guided by the similar examples of other indigenous peoples of the Circumpolar region. Norwegian government responds on this question with a categorical refusal. Regardless of the type of the resource, all of them belong equally to the entire Norwegian population. It cannot be one privileged social group that could have exclusive rights to a particular resource and to veto development in Norway. Resources

should "work" for the well-being of every member of the Norwegian society (Hansen & Midtgard 2008).

Another trend that has an influence on the relationships between gas and oil industry and Sami people is the climate changes. The global warming creates favorable conditions for the expansion of the oil and gas industry in the Arctic. The melting of permafrost and sea ice makes natural resources more accessible. The extractive actions become more intense, the transport infrastructure develops, the indigenous territories become more urbanized and industrialized. As a result, the regional ecosystem is changing, which is mostly effects on reindeer herding. In particular, destruction of the pastures creates the significant obstacles to reindeer herding in particular and Sami way of living in general. However, this threat is mostly produced by mining industry rather than gas and oil industry due to that fact that most of the gas and oil activities are implemented offshore in Finnmark (Tozer 2011).

## **5.6 Discussion**

The discussion will follow the previously developed approach of the transition from a general analysis of the employment environment for local communities of Finnmark to a particular case of the indigenous population.

Finnmark's local population is characterized by the prevalence of the group in age 20-39 years. The number of men is greater than the number of women. The local community has a quite high level of education and positive health indicators. In the words of the "Self-concept theory of D. Super", most of the local population formed as potential employees, defined their career goals and preferences, made their occupational position secure (Betz 1994). The amount of human capital in Finnmark is rising, which creates the sustainable base for the development of the local and national economy (Becker 1993). These features meet the need of gas and oil industry in a young, healthy and educated workforce. Despite the high level of in-migration, in particular, labor migration, gas, and oil industry has mostly individual labor demand, rather than aggregate (Oreopoulos 2004). Therefore, a large influx of labor from other countries and regions of Norway does not create significant competition for the local labor force.

As can be seen, already today the majority of the local population are employed in local companies, especially in the oil and gas industry and related industries. The unemployment rate is only 4,5 percent which slightly exceeds the national indicator (Statistics Norway 2017). Local labor market policy follows a goal to increase this tendency trough the development of the Corporate Social Responsibility, point educational programs aimed at the local population,

target training of the local employees, instead of importing foreign ones. As a result, this policy creates such work environment, which on the one hand, meet the needs of the local employee and on the other hand meet the needs of the gas and oil companies (Dawis and Lofqisit 1969).

Gas and oil industry of Norway and Finnmark is characterized by the resistance to fluctuations in world prices for resources, therefore the reduce of labor demand is relatively small. For such peripheral region as Finnmark oil and gas industry is the driver of development. This is understood by both the authorities and the local population. Work in the oil and gas industry offers high salaries, high standards of living and the opportunity to stay in the hometown.

The presented facts speak for themselves. Evaluating the local labor market by the employer representing the oil and gas sector, Finnmark's local labor force not only meets the necessary requirements of the oil and gas employer but also wants to be employed both in the oil and gas industry and locally. To put it differently, from the position of local representative, the oil, and the gas labor market is one of the most promising and rapidly developing in Finnmark. Gas and oil industry requires workers of different professions, which provides scope for self-realization. Adding here a developed employment policy of Norway and Finnmark, I would characterize the situation as a match between labor demand and labor supply.

Altogether employment environment for a local non-indigenous community of Finnmark promote their participation in the local gas and oil industry. Accordingly, it is possible to conclude that local (non-indigenous) Finnmark's employees are highly relevant for gas and oil industry and these companies and communities collaborate.

Considering the indigenous part of the Finnmark's labor force, Sami people is an essential part of the local population. For them, this area is not only extreme North but a homeland. Despite the significant role of reindeer herding in the life of this indigenous people, more and more Sami youth prefer employment in the industrial sector. They are motivated by the same motives as the non-indigenous population - the desire for self-realization and a good standard of living.

Assessing the overall attitude of the Saami people towards the oil and gas industry, document analysis did not reveal any significant conflicts and confrontations. Firstly, Indigenous population understands the importance of the gas oil industry in national and regional perspective. Secondly, gas and oil industry in this region is "not mature enough". The processes described above are "a history that occurs here and now". Indeed, most of the gas and oil industrial activities take place offshore, and mainly in Hammerfest. Projecting this attitude on

the labor market scope, the work environment provided by the gas and oil industry of Finnmark does not contradict “Sami personality type”. In the terms of J. Holland’s theory, the stable nature of relations between the oil and gas industry and the indigenous community is reflected in the outlook of the future employee through the process of socialization (Nauta 2010).

Another important fact that should be considered is the features of employment of indigenous peoples in the framework of local and national legislation of Norway. The document analysis revealed that there are no laws, regulations and governmental programs in Norway regulating the process of indigenous peoples’ employment in gas and oil industry. Correspondingly, the potential indigenous employee is treated as any other non-indigenous employee. The absence of documented specific treatment to the indigenous employee can be explained by the unnecessary. As an illustration, Norway has no officially recorded cases of discrimination against the Sami in the labor market.

However, another factor that complicates the overall assessing the position of Sami people in relation to the gas and oil labor market is a lack of documented information on this topic. Norwegian SSB does not have officially registered data about social and economic characteristics of Sami people in Finnmark. In addition, the described processes have not received yet the sufficient coverage in the academic scope.

All things considered, despite some differences in views on the development of the oil and gas industry on the indigenous lands, there are no fatal issues between the Sami people and the gas and oil industry of Finnmark. In essence, I can say that there are no significant barriers that will prevent Sami people from employment in gas and oil industry of Finnmark. Due to some limitations of the academic resources on this topic, the situation could not be evaluated as the perfect match between labor demand and labor supply. However, at this instant local indigenous Finnmark’s employees are highly relevant for gas and oil industry and these companies and communities collaborate.

## **Chapter 6. Conclusion**

### **6.1 Lessons learned**

The conducted document analysis was based on a single theoretical model, which provides us with the possibility of comparison and generalization. There are some common factors that have the largest influence on the matching of the employment needs of local Arctic communities (indigenous and non-indigenous) and gas and oil industry. The first group of factors is demographic trends. Gas and oil industry needs a young, healthy and educated labor

force capable and willing to work. In essence, the population of Finnmark and Alberta have a low population density, a significant number of indigenous people with a high birth rate, and a large number of people in working age. However, the local population of Alberta has a bigger indigenous community with more diverse structure. Finnmark region in Norway has only one indigenous community presented by Sami people. Altogether, some basic socio-demographic characteristics of the local employment environment of these regions are identical and meet the needs of the gas and oil industry.

The second group of factors can be titled “economic environment of the region”. The local population is looking for a stable employment, with a decent salary to ensure a normal standard of living. Gas and oil industry of Norway and Canada have a higher level of salaries comparing with the other local employers. Alberta and Finnmark have a tendency of social inequality produced by these differences in income. However, Alberta region has a less favorable economic situation: high level of socioeconomic inequality and poverty, especially among the employed population. On the contrary, Finnmark is in more favorable economic conditions, despite the difference in incomes, inequality is minimal and poverty is absent. All in all, gas and oil industry represents a desirable area of employment for local non-indigenous communities of Finnmark and Alberta.

The third group of factors is related to the economic performance of the gas and oil industry. In other words, the bigger performance of the gas and oil industry the bigger is the labor demand. As it was mentioned earlier, the gas and oil activities of Alberta and Finnmark shape the national economy of Canada and Norway and have a tendency to grow. Correspondingly, the labor demand on the Alberta’s and Finnmark’s gas and oil labor market is quite stable and requires various labor supply.

As can be seen, there are three main groups of factors that have the largest influence on the matching of the employment needs of local Arctic communities. It should be emphasized, that they can be applied to the indigenous and non-indigenous population. However, the matching of the employment needs of the indigenous population and gas and oil industry requires the consideration of some additional factors. Such factors can be titled as the general “attitude” of the indigenous population towards the oil and gas industry. The formation of this attitude is directly related to the potential threat of the gas and oil activities on the indigenous lands. In Alberta, the industrial activities are based on “tar sand” processing. They threaten the environmental viability of the indigenous communities and largely ignore their interests and

opinions. The attitude of indigenous people to the gas and oil industry is mostly negative. In Finnmark, gas and oil activities are mainly concentrated in Hammerfest and offshore. As a result, the negative influence of the oil and gas industry is minimal, and it is perceived mostly positively by indigenous peoples.

Another key point concerning the matching of the employment needs of local Arctic communities (indigenous and non-indigenous) and gas and oil industry is specific strategies implemented by the government, employers and other actors of the labor market.

One of the most significant roles in the labor market regulation belongs to the authorities. The local and national governments have various measures aimed at the social protection and facilitation of the employment process of the local communities. The government of Canada and Norway understood the economic importance of the gas and oil industry for the local regional development. For the most part, Norwegian and Canadian authorities facilitate the matching of the needs of local non-indigenous communities and gas and oil industry through the development of educational programs, promotion of the Corporate Social Responsibilities, prevention of the discrimination and other labor market policies. Specifically, in Canadian labor market, indigenous peoples are a special object of attention. There are various point measures aimed at the employment of indigenous people. Therefore, the Canadian labor market legislation has developed a special mechanism for attracting, recruiting and treating the indigenous employees, which takes into account their socio-cultural characteristics. On the contrary, in Norway, there is no special treatment for the indigenous labor force. Labor market “perceives” them equally as any other non-indigenous labor force. As a result, the employment process of both parts of the local community proceeds in accordance with the same recruiting schemes, legislation, etc.

Another strategy is connected with the development and adherence to the national and international legislations. This strategy has specific importance for indigenous people and their rights to the lands. Norway and Canada have developed national and regional legislations based on the international conventions and rules. However, in Canada, the authorities are mostly “on the side” of oil and gas companies and are mostly guided by the economic benefits. This tendency led to the fact that the rules and laws “do not work properly”. In Norway, the international and local legal norms are respected, and indigenous people of Finnmark are in a better position towards the gas and oil industry than in Alberta.

To sum up, the matching mechanism of meeting the needs of local employee and employer of Alberta and Finnmark is arranged in a similar way. In both regional labor markets, local non-indigenous employees are highly relevant for the gas and oil industry and these companies and community collaborates. In Norway, such relevance is higher due to higher general standards of life than in Canada. Considering the relevance of the indigenous local communities towards the gas and oil labor market, the situation is more complicated. In Alberta despite the legally documented special treatment to the indigenous labor force, the negative impact of the development of the oil and gas industry on the viability of the indigenous communities is very significant. Therefore, local indigenous Alberta's communities and gas and oil industry are not relevant for each other, therefore, labor collaboration is not possible. In Finnmark, there are no significant barriers that prevent Sami people from the employment in gas and oil industry. At this instant, local indigenous Finnmark's employee is highly relevant for the gas and oil industry and these companies and communities collaborate.

I would say, that the Canadian situation can be characterized more as a "frontier attitude" to both the region as a whole and to indigenous peoples in general. In Norway, the current situation is more under the definition "of a homeland attitude".

To summarize, the Circumpolar region is often perceived as a single socio-geographical area, which, despite belonging to different countries, has many similarities in various aspects (in this case, the labor market). However, this study emphasizes how the same process of employment of local communities could develop in different ways in Norway and Canada.

## **6.2 Research limitations**

All in all, this master thesis faces certain limitations. Firstly, use of the case study approach and document analysis research method led to the limitations, connected to the reliability and availability of the data. Describing Canadian case, the sufficient amount of the data was provided by Canada's national statistical agency and Alberta's government. However, they are not monitoring indigenous labor market tendencies outside the urbanized centers Calgary and Edmonton. Considering the Norwegian case, there are not so much available information in the English language.

Another limitation is related to the lack of prior research studies on the topic. As it was mentioned, gas and oil industry of Finnmark is the process that is developing "here and now", accordingly the issue of relationships between Finnmark's industrial labor market and Sami population did not receive the proper academic evaluation yet.

Finally, the chosen measures to collect the data limit the depth of information and global generalizations.

Despite these limitations, this master thesis answered on the research questions and made some theoretical and practical contribution

### **6.3 Contribution to theory**

Assessing the results of this research, it is possible to call it multidisciplinary. A special mechanism for analyzing the labor market was formed. Based on the disclosure of the three main categories “labor demand”, “labor supply” and “matching”, I used the theories of social psychology to explain the employee's preferences, economic and management theory to explain current trends in the labor market and sociological theories to explain general mechanisms of employment. According to the scientific literature, the labor market analysis is usually associated with the economic context. Within the framework of my research, the economic side was supplemented by the cultural, political and social characteristics. In addition, the special framework for analyzing the position of indigenous people in the labor market was formed.

From a theoretical point of view, this research presented the issue of local employment in gas and oil industry through the prism of social sciences analysis. This project tried to fill the gap in knowledge because previously this topic received a lot more attention in the perspectives of oil & gas sciences and technologies.

Overall, this research contributes to the study of the Circumpolar region. The studied issue received a comprehensive evaluation, which allowed to synthesize knowledge from various sources: corporate programs and rules, state reports and manuals, academic articles and digest empirical data, official statistics, etc. Hence, this study may contribute to the development of a stronger theoretical foundation for the further empirical investigation of the gas and oil labor market in the Circumpolar region.

### **6.4 Suggestions for further studies**

This thesis has collected detailed information evaluating the current interaction of local and indigenous people with the oil and gas labor market on the examples of Northern areas of Canada and Norway. First of all, I came to the conclusion that the observed processes are dynamic and constantly changing and that's why it will be interesting to carry out further studies on the changing nature of this issue. Moreover, as noted earlier, the main methods of the current study were the case study and the document analysis that allowed to form a stable theoretical base. In the future, this issue ought to be studied empirically to examine the dynamic changes.

Finally, this study covers only a small part of this issue within the borders of these countries. However, the Circumpolar region is the unity of several countries and indigenous peoples. Accordingly, in the future, this study can be continued within the other countries members of the Circumpolar region, which will assist to form a more complete picture and fuller understanding of the problem.

As a concluding remark, I would mention that in modern conditions, the perspectives of development of the indigenous culture are highly interrelated with the regional industrial development. Nowadays we can observe the beginning of the process of awareness of mutual responsibility and interest in establishing new relationships between the local and indigenous community and gas and oil industry. Such a partnership cannot arise by itself, bilateral work on its development and strengthening is necessary.

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