Uranium & Nuclear Energy Market

Fact Sheet

Pro's:

Rising demand in developing countries (e.g. China and India)

Possible revival of nuclear energy sector in Japan

Refurbishment of old plants in France, Britain and the United Stated

Possible increase of demand for a carbon-free energy scenario

Available amounts of secondary supply (state inventories) nearly depleted

Production prices of uranium above current market price =>

Makes mining and production unprofitable

Industry leaders (e.g. Cameco) want the price to go up

Production cuts (e.g. closure of mines)

Stock share prices of most companies involved in the uranium and nuclear energy market at an all time low

Excellent risk/reward ratio

Nearly all of the urnanium in the U.S. is being imported

About XX% is imported from Russia, Kazakhstan and Uzbekistan

US-companies Energy Fuels and UR-Energy want the United States to ensure U.S. producers control 25 percent of the market (7% as of 2017)

U.S. Department of Commerce initiated Section 232 investigation for uranium imports

Strategic metal (political relevance)

Innovation (e.g. Small Modular Reactor)

Nuclear energy advantegeous in areas with high population density (coastal China, Southern Asia, Japan) where there is not enough space for solar or wind energy plants

Constitutes a big part of energy production in the future energy policy of China

Suitable as baseload energy with constant power supply

Con's:

Stagnant an or even decreasing demand in several European and American countries

Accidents like Three Mile Island, Tshernobyl and recently Fukushima caused deep concern among the public and gave the industry a bad reputation

Renewables strongly gained in popularity in the past two decades

Developed countries shifted their focus on renewable energies (e.g. Germany, Scandinavia, Portugal)

Market Overview

Producer's Side Consumer's Side

About 7% of the uranium delivered to U.S. reactors in 2017 was produced in the United States and 93% came from other countries.

In 2017 the United States imported its uranium from the following countries: Canada (35%), Australia (20%), Russia (18%), Kazakhstan (12%), Uzbekistan (5%)

In 2018 the three biggest uranium producing countries are Kazakhstan, Canada and Australia

In 2018 the five biggest uranium consuming contries are the United States, France, Russia, China, South Korea

In 2018 the five countries with the biggest uranium resouces are Australia, Kazakhstan, Russia, Canada and South Africa

In 2017 the five biggest natural uranium exporting countries were Kazakhstan, Canada, the United States, Niger and Namibia

In 2017 the five biggest enriched uranium exporting countries were France, the Netherlands, Germany, the United States and China

Uranium mining companies may be subdivided according to following categories:

market strategy:

1. Solely focusing on uranium exploration and production

2. Focusing on several minerals (Uranium, Thorium, Vanadium, Rare Earth Elements, amongst others)

Most of all mining companies are headquatered in Canada and Australia with some of them running established or newly founded mining projects in South America or Africa

List of companies

Canada	Australia	China	US	Japan	South Korea	UK
Cameco	Energy Resources of Australia Ltd.	CGN Power (China General Nuclear Power Group)	Energy Fuels Inc.			
Denison Mines Corp.	Peninsula Energy Ltd.	CNNC International Ltd.	Ur-Energy Inc.			
Blue Sky Uranium Corp.	Toro Energy Ltd.		Westwater Resources Inc.			
Fission 3.0 Corp.	Paladin Energy Ltd.					
Fission Uranium Corp.						
Forum Energy Metals Corp.						
Mega Uranium Ltd.						
Purepoint Uranium Group Inc.						
UEX Corp.						
Plateau Energy Metals Inc.						
Laramide Resources Ltd.						
IsoEnergy Ltd.						

Start-Ups:

NuScale Power (founded 2007)

TerraPower (Bill Gates; founded 2006)

Transatomic Power (founded 2011, backed by Peter Thiel)

General Fusion (founded 2002 backed by Jeff Bezos)

TAE Technologies (check; nuclear fusion startup)

Commonwealth Fusion Systems (founded 2017, nuclear fusion)