

The Egyptian Center for Economic and Social Rights

Rejects the Use of Coal as an Alternative Source of Energy

Within the current transitional period, the ministry of Trade and Industry is considering the use of coal as an alternative source of energy, ignoring its detrimental effects on the environment and on public health. The Egyptian Center for Economic and Social Rights strongly condemns the move to use coal as a source of energy in the cement industry. In this respect, ECESR calls on the ministry of Trade and Industry and other ministries to conduct careful evaluations of the impact of the use of coal, both on the environment and on the health of local populations, while considering safer alternative sources of energy. ECESR also encourages the relevant ministries and decision makers to listen to the calls of civil society organizations, the ministry of environment and other entities, who have raised serious concerns regarding the use of coal as a source of energy.

Background

Ousted president Morsi's government announced its intention to import coal to power Egypt's cement industry due to the lack and volatility of natural gas supplies¹. Few weeks ago, and in the absence of clear government consent, Lafarge, one of the most profitable cement multinational companies, imported "8 million tons" of coal into Egypt. Lafarge's mountain of coal was erected in the port of Alexandria and was later transported into Egypt.²

Lafarge's action came amidst a dispute on the use of coal that rose between Dr. Laila Iskandar, minister of Environment on the one hand, and Mounir Fakhry, minister of Trade and Industry, on the other hand. Dr. Iskandar is opposing the use of coal as an alternative, citing coal's heavily polluting impact. On the other hand, Fakhry argues for the necessity of the use of coal, to save the cement industry from the volatile availability of natural gas.³ While the debate continues on the ministerial level and within the public sphere, cement industries are getting ready to switch to coal.

Why the Ministry Of Trade and Industry Decided on Coal

¹ "No gas? No problem, Morsi government assures industry." Mada Masr. <u>http://goo.gl/Tvjj2l</u> (accessed November 25, 2013).

³ Hozayen Ahmad, The economic effect of coal presentation, Egyptian Against Campaign. 21st November, 2013.

² It is still unclear where the coal was transported to, but news sources suggest the coal was transported to Helwan, either to Lafarge's storages, or to Swiess Cement's Storages.



Seeking financing from EBRD, the minister of Trade and Industry emphasized the importance of using coal as an energy alternative. This decision would primarily benefit the cement industries, especially in a period where the availability and prices of natural gas are uncertain. Coal is intended to act as the energy solution to the cement industry, considered one of the most profitable industries, and constantly benefitting from several public subsidies, especially on natural gas and electricity used.

Arguably, the ongoing use of subsidized natural gas to power the cement industries is resulting in energy loss, and over-consumption. The careless consumption of subsidized energy by industries has caused higher-than-average energy consumption rates, or what's referred to as over-use of energy, where even Egypt and other less energy intensive economies require about 40% more energy-per-unit of economic output than many other similarly less-energy intensive economies such as Denmark and Spain⁴. Therefore, the move for industries' use of coal at market prices will arguably lessen the energy loss that results from the state's provision of subsidized natural gas to industries. This, in turn, raises the question of why the government continues to provide natural gas to energy-intensive industries, at subsidized rate, and consequently cause over-consumption of energy by industry.

Denying the environmental and health costs of the use of coal, Minister of Trade and Industry claimed that specific technical methods can be used to save the environment from adverse effects of coal. Because the minister failed so far to communicate the details of these methods, and because worldwide coal has been dubbed as heavily polluting, even by the World Bank, the European Investment Bank, China and the USA, the burden of proof resides with the ministry of trade and industry to show how they will avoid the polluting effects of coal. Unless this is done, the insistence on the use of coal will only mark a deficit in good governance, where ministries fail to communicate and take decisions for the public good, but would also represent a continuation of the Mubarak policies, where the state works for the interests of the business elite, ignoring the consequences of its decisions on the people.

Why the Ministry Of Environment, And Others, Reject Coal

⁴ Fattouh, Bassem and El-Katiri, Laura. "Energy Subsidies in the Arab World". Arab Human Development Report. Research Paper Series. 2012. United Nations Development Program (UNDP). <u>http://goo.gl/RFWhHp</u>



From climate, to health, to economic cost, different opponents of the use of coal as an alternative source of energy have highlighted many negative consequences.

Firstly, the use of coal has major impact on climate change. According to a recent World Bank report: carbon dioxide emission will lead to the increase of temperatures by 2100 which could lead to catastrophic changes; including extreme heat waves, declining global food stock and sea-level rise affecting hundreds of millions of people. ⁵ In addition, coal fired power plants are the biggest source of man-made CO2 emissions. This makes coal energy the single greatest threat facing climate globally. Resulting climate change includes drought, flooding and massive population displacement caused by rising sea levels. Apart from climate change, coal also causes permanent damage to the environment, people's health and communities around the world.

This brings us to, secondly, the impact of coal on public health. Due to the emission of Carbon dioxide, Nitrogen oxide and mercury with very high levels; coal can cause blockage of blood vessels, pulmonary embolism and cancer. Leakage of mercury to the water during the scrubbing of coal has harmful impact on the fish and human beings.⁶ Bearing in mind the inefficient safety measures in industries that Egypt continuously suffers from, there is little doubt that the Nile water, for instance, will be fast contaminated. Additionally, Egyptians cannot bear additional health burdens, when more diseases are introduced and additional health care becomes necessary, with the introduction of coal. So far, total public expenditure on the health sector shows worrying decreases. In 2010/2011 it was 4.17%, it decreased to reach 4.0% in 2011/2012, increased in 2012/2013 to reach 4.33%. This number has decreased until it reached 4.02% for the year 2013/2014. Coupled with budget cuts, the health sector is becoming increasingly privatized, thus inaccessible to many who cannot afford paying out-of pocket⁷. This means that the existing health system will not be able to accommodate more illnesses and diseases, if coal was to be used as a source of energy.

All these negative environmental and health impacts are expected to occur within seven years after starting to use coal. They are also considered to be the real cost of coal. The ongoing claim that coal can be used within an environment-friendly context remains unfounded, and continues to ignore the real hidden cost of coal on health, negative impact on the environment, the impact on the tourism sector, and agricultural.

Thirdly, there is a serious economic cost of the shift to coal. Because of the absence of the equipment needed for utilizing coal, but also because no studies have been conducted on the international prices of coal, and the import prices, and the cost of

⁵ World Bank press release: New report Risks of 4 Degrees Hotter World by End Century, 18th November, 2012.

⁶ Egyptians against coal campaign, 21st November, 2013.

⁷ Enacted Budget Documents for fiscal years 2010/2011 to 2013/2014 <u>http://goo.gl/OxUufJ</u>



switching factories to operate on coal, the economic cost of coal is usually ignored. In addition, when the additional costs of health and climate are taken into consideration, safe renewable sources of energy are much cheaper than fossil fuel and coal.

Way Forward: Consider the Alternatives

There is indeed a great need to rethink the energy strategy of Egypt; not only do the regressive energy subsidies eat up a great bulk of the annual state public budget, but they also largely serve corporations and investors, instead of targeting those most in need. In this respect, lowering subsidies for energy-intensive industries, such as the cement, glass and other industries is a must: not only to considerably decrease the annual bill of energy subsidies, but also to counter the over-consumption of energy in these sectors. Even conservative studies have shown that these high-profiting industries will not be affected by such a lifting of energy subsidies.⁸

The export of natural gas is another issue that needs to be re-thought and reformed. Egypt continues to export 1/3rd of its natural gas to Turkey, Jordan and Spain at prices below international prices, while the ministry of electricity and energy is indebted of USD \$6 billion to companies from which it imports gas at much higher prices than it imports. ECESR calls upon the government of Egypt to revise its natural gas agreements with the importing countries, and adjust the pricing system. Experts expect a raise of revenue estimated at EGP 15billion/year if such revisions are to take place.⁹

In addition, a wide range of alternative energy solutions waits to be explored by the state. The state continues to ignore alternative sources of energy, including the use of waste, but also the use renewable energy. For instance, ECESR calls on the government to undertake a baseline study on the use of waste as a form of energy¹⁰: Egypt exports millions of tons of garbage annually, Cairo alone exports 9.5 million tons of garbage every year to be used as a source of energy in other countries.¹¹ While Egypt is facing a waste management problem, waste would be a strategic solution to investigate, and will solve both the energy problem and the waste management crisis.

When the latter proposal was put forward by the minister of environment and the minister of local development, investors rejected using waste citing high costs. This lack of regard to alternatives is supported by the ministry of trade and industry and other government bodies, and threatens the public good. While the financial cost is

⁸ See Khattab, Abdallah. 'The Impact of Reducing Energy Subsidies on Energy Intensive Industries in Egypt'. ECES. 2007.

⁹ "Turning to coal." Turning-to-coal-. <u>http://goo.gl/A9FbBD(accessed November 25, 2013)</u>.

¹⁰ "Cement companies reject using waste as a source fuel, seek permission for coal." Daily News Egypt RSS. <u>http://goo.gl/Ql5PnZ</u>(accessed November 25, 2013).

¹¹ "البيزنس القمامة يزدهر الدخل اليومي للصغار بالمئات. والكبار يملكون1500 شركة وورشة لتدوير المخلفات. <u>http://goo.gl/gJQTob</u>



not very different, the real cost of coal is such as the destruction of the health and environment, not just of the direct residents of neighborhoods wherein cement factories are located, but will also have detrimental effects on water, air, health nationwide, and will remain for generations.

National campaigns have emerged in Egypt to counter the move to coal, such as 'Egyptian Against Coal' campaign, while International Campaigns such as "Coal-Free EBRD" have emerged to pressure the European Bank to move away from financing coal projects, just like other banks did, notably the World Bank and the European Investment Bank.¹²

In view of this, the Egyptian Center for Economic and Social Rights rejects the current proposed strategy of using coal as an alternative source of energy, and calls on the state to consider alternatives at hand, in order to overcome energy problems without causing health and environmental degradation. ECESR also calls on the state to create channels for the participation of civil society, environmentalists and other stakeholders in decision-making processes, in order to ensure public good is at the priority of policy-making.