

Statement before the Congressional-Executive Commission on China  
**Forced Labor and the Xinjiang Solar Industry**

September 21, 2021

Testimony of **Nyrola Elimä**

Supply Chain Analyst  
Helena Kennedy Centre at Sheffield Hallam University

Chairman McGovern, Chairman Merkly, and distinguished Members of the Commission, thank you for bringing us together on this very important issue and offering me an opportunity to testify.

### Forced Labor in Xinjiang

In the spring of 2018, significant evidence began to emerge that the People's Republic of China government understood its system of detention centres and internment camps as merely one part of a massive transformation of the Xinjiang Uyghur Autonomous Region into a docile and lucrative economic hub.<sup>1</sup> While continuing to hold indigenous citizens of the region in internment camps without trial, regional and local governments shifted their focus to the creation of an enormous forced labour regime. This system had the explicit goal of employing practically every adult citizen and was accompanied by the justification that the programme would increase both the economic productivity and the "stability" of the region.

China has placed millions of indigenous Uyghur and Kazakh citizens from the Xinjiang Uyghur Autonomous Region into what the government calls "surplus labour" and "labour transfer" programmes.<sup>2</sup> The Chinese government claims that these programmes are in accordance with Chinese law and that workers are engaged voluntarily, in a concerted government-supported effort to alleviate poverty. However, employing government documents and state media reports, researchers have clearly identified that, as they are practiced in the XUAR, these so-called "surplus labour" and "labour transfer" initiatives are in fact mechanisms of a massive programme of compulsory labour.<sup>3</sup> Evidence reveals that labour transfers are deployed in the Uyghur Region within an environment of unprecedented coercion, undergirded by the constant threat of re-education and internment.

State-sponsored labour programs exist in other parts of China, but in Xinjiang alone, the programmes are grounded in the logic of labour as a strategy of anti-terrorism. For Uyghur people to resist state-sponsored programmes purportedly designed to encourage vocational skills and "poverty alleviation" would be to align themselves with the so-called "three evils," which are the rationale for the CCP's crackdown and criminalization in the Uyghur region, including the camp system.<sup>4</sup>

---

<sup>1</sup> Nathan Ruser, "Exploring Xinjiang's detention centers," The Xinjiang Data Project, Australia Strategic Policy Institute, September 2020, [Online](#); Adrian Zenz, "'Wash brains, cleanse hearts': Evidence from Chinese government documents about the nature and extent of Xinjiang's extrajudicial internment campaign," *Journal of Political Risk*, 7:11 (November 2019), [Online](#).

<sup>2</sup> The State Council Information Office of the People's Republic of China, "Employment and labor rights in Xinjiang" [English version], September, 2020, [Online](#).

<sup>3</sup> Amy Lehr and Mariefaye Bechrakis, "Connecting the dots in Xinjiang: Forced labor, forced assimilation, and Western supply chains." Center for Strategic and International Studies, 2019, 4-8, [Online](#); Vicky Xu et al., "Uyghurs for sale: 'Re-education', forced labour, and surveillance beyond Xinjiang," Australian Strategic Policy Institute, [Online](#); Adrian Zenz, "Coercive labor and forced displacement in Xinjiang's cross-regional labor transfer program: A program-oriented evaluation," Washington, DC: The Jamestown Foundation, 2021, 19-21, [Online](#).

<sup>4</sup> Enshen Li, "Fighting the 'Three Evils': A structural analysis of counter-terrorism legal architecture in China," *Emory International Law Review*, 33:3 2019, 5-6, [Online](#).

The CCP's labour transfer programme in the Uyghur Region is used to punish people with oppositional ideological views, to create a regime of economic development built on compulsory labour, and to discipline the masses whom they deem to be inherently deficient because of their race and religion. If a person does not comply with the state-sponsored labor transfer program offered to them, they can be branded as radicalized and a potential terrorist and can be sent to an internment camp. This is drawn directly from government directives. This is why the US government, lawyers, and experts on forced labor have determined that labor transfers as they are practiced in Xinjiang constitute forced labor.

### Uyghur forced labor in the solar industry

The solar industry is particularly vulnerable to forced labour in the Uyghur Region because around 95% of solar modules rely on one primary material – solar-grade polysilicon.<sup>5</sup> In 2020, China produced nearly 75% of the world's polysilicon, which includes solar-grade and electronic-grade. The four largest producers in Xinjiang alone account for around 45% of the world's solar-grade polysilicon supply. Hoshine Silicon Industry, the metallurgical-grade silicon producer (input into polysilicon) in the region with the highest production capacity, has participated in state-sponsored forced labour transfer programmes in the Uyghur Region. All four of Xinjiang's largest polysilicon manufacturers– Daqo, TBEA (and subsidiary Xinte), Xinjiang GCL, and East Hope – have reported their participation in labour transfer or labour placement programmes and/or are supplied by raw materials companies that have. Daqo alone is a supplier to the four largest solar module manufacturers in the world – JinkoSolar, Trina Solar, LONGi Green Energy, and JA Solar.

In the course of this research, we identified

- 1) 11 companies engaged in forced labour transfers
- 2) 4 additional companies located within industrial parks that have accepted labour transfers
- 3) 90 Chinese and international companies whose supply chains are affected
- 4) that manufacturers at various stages of production of solar modules -- from raw materials to metallurgical grade silicon to polysilicon to wafers to panels -- were complicit in forced labor.

However, forced labour wasn't the only problem in the Solar supply chains.

As of 16 years ago, seven companies headquartered in the United States, Germany, and Japan made practically all of the polysilicon needed to manufacture solar modules for the world; China had almost no presence in the polysilicon market. But by 2020, China produced nearly 75% of the world's polysilicon. The journey to this extraordinary market share only took 15 years, and it saw rapid acceleration in the last five.

---

<sup>5</sup> Bernreuter Research, "Solar value chain: how China has become dominant in all production steps for solar panels," Bernreuter Research Polysilicon Market Reports, June 29, 2020 [Updated August 18, 2020], [Online](#).

Moving manufacturing to Xinjiang, where they are producing polysilicon using coal-based energy, helped China to cut everyone out of the market by making the price of polysilicon very low. Coal is cheap and it's heavily subsidized in Xinjiang. To encourage polysilicon companies to make the distant move out to Xinjiang in the mid-2010's, the government promoted the development of the Zhundong Coal Power Base, which has powered the polysilicon giants that moved into the region.<sup>6</sup> To better facilitate the growth of the new energy economy in Zhundong, the government planned an expansion of the railroad and airports into the otherwise largely deserted region as well.<sup>7</sup> Companies moved to Xinjiang around 2015-2016 and became fully operational in 2018. From that time most other polysilicon markets in the world have changed their business model to not produce the polysilicon anymore.

Some of the PRC's leading new energy giants have taken full advantage of the benefits of proximate and cheap coal to fuel their polysilicon production. Xinjiang GCL and East Hope both call the region home. TBEA has a coal plant there, and their factories for both polysilicon manufacture and other electrical products they create are located just outside.

The Zhundong Zone also had a strong relationship with the local labour transfers programmes before the camp system. Since 2016 and the increasing rise of repression in the Uyghur Region, labour transfers continued apace upon a backdrop of internment camps, supplying the PRC's solar industry with labourers who were compelled to participate.<sup>8</sup> The Human Resources and Social Security Bureau of Changji Prefecture, where the Zhundong coal mines are located, boasted in 2018 that it had conducted 11,631 transfers of surplus labour to date.<sup>9</sup> The compulsory programmes continue even now, supported by incentives provided by the social security bureau to companies within Zhundong for absorbing the transfers.<sup>10</sup>

The global solar industry faces limited but feasible alternatives to sourcing solar materials tainted by forced labor in Xinjiang. These are:

- a) Technologies that don't use polysilicon at all.
- b) Polysilicon manufacturers that don't use Xinjiang input at all.

---

<sup>6</sup> “新疆维吾尔自治区国民经济和社会发展: 第十三个五年规划纲要” [National economic and social development of the Xinjiang Uygur Autonomous Region: Outline of the thirteenth five-year plan], May 2016, [Online](#), 40.

<sup>7</sup> Ibid, 65-66, 82-84.

<sup>8</sup> Zhundong Development Zone Up Close, “准东开发区转移乌恰县25名农村富余劳动力来准东就业” [Zhundong Development Zone transferred 25 surplus rural labourers from Ulugqat [Wuqia] County to Zhundong for employment], Weixin, December 27, 2016, [Online](#); “天山早春图—最美的是你们追梦的模样” [Tianshan early spring picture -- The most beautiful thing is the sight of you pursuing your dreams], Weixin, February 26, 2019, [Online](#).

<sup>9</sup> “新疆昌吉市劳务经济助力农民增收” [The labour economy of Changji City in Xinjiang helps farmers increase their income], China's Employment, May 7, 2018, [Online](#).

<sup>10</sup> Changji People's Government, “昌吉州决战决胜 脱贫攻坚系列报道之二” [The second part of a series of reports on Changji Prefecture's decisive victory in poverty alleviation], Weixin, July 2, 2020, [Online](#).

c) Emerging technologies that have previously been priced out of development because of China's low prices.

It is critical that the U.S. enforce the Tariff Act to ensure that these Xinjiang-made goods, which are both bad for human rights and for the planet, are not reaching United States consumers. And as our evidence shows, these violations reach all the way to the raw materials, and there can be no part of the supply chain that is unaffected. Pursuing alternatives to Xinjiang supply chains requires multiple organizations and governments to harmonize strategies. This is not only the United States' responsibility. Therefore, I urge the U.S. government to work with the EU and other allies, including my own Swedish government.

Personal context:

I am grateful to the committee for the opportunity to also relate my personal experience of repression at the hands of the Chinese government. Over the course of three and half years, the Chinese government, especially the Ghulja city government, has inflicted significant pain to me and my family.

What the Chinese government did to my cousin can be described in a few sentences. Like so many other Uyghurs, she was first taken to the camp in 2018, released, then taken to the detention center again. She was then sentenced to six-and-a-half years in prison after being accused of financing terrorism. She was convicted for transferring money to Australia to help her parents buy a house in 2013, which was both legal at the time she made the transfers and facilitated by Chinese banks.

Behind this short description is Mayila and my family's 3 and half years of excruciating pain, day and night. The Chinese government knows she is innocent because I have sent evidence that can prove her innocence to the Beijing government, the Chinese embassies in the EU and Australia, the Xinjiang autonomous region government and the Ghulja prosecutor's office multiple times with help of international journalists. In order to deliberately convict an innocent person, the Ghulja Public Security Bureau fabricated the evidence. She was forced to sign a false confession under threat of torture, and this false confession was used as evidence to convict her. In addition, authorities falsely claimed that her parents in Australia "were members of the so-called 'Eastern Turkistan Liberation Organization,'" an organization we had never heard of.

Mayila's parents want to seek justice through the international legal system for their daughter, but they have been told there isn't much a lawyer can do when it comes to the crime that the Chinese state committed. We did everything we could, to the extent that Chinese officials have threatened me and my family for speaking out publicly, but still all our efforts have failed to bring her justice.

Thank you.