2022-1986 RUSSIA'S WAR ON UKRAINE AND THE BATTLE FOR CHORNOBYL

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дня народження А. Ф. Прихотько — українського ра-Аянського фізика. (1906). 100 років від дня народження Габдулли Тукая — татарського поета, публіциста. (1886—1913).

> A calendar with the date of the Chornobyl catastrophe (Saturday, 26th April 1986) lies amongst syringes, in Pripyat's hospital. Physicians had prepared a vaccination campaign for the last week of April 1986. However, on Sunday 27th the entire city of Pripyat was evacuated due to the Chornobyl catastrophe.

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INTRODUCTION

Forgetting Chornobyl was never an option for Ukraine

Thirty-six years after the nuclear disaster at the Chornobyl nuclear power plant, the people of Ukraine are suffering the even greater catastrophe of an illegal war waged by the Russian government. Amidst the calamity of the current war, there is another anniversary - 26 April 1986 nuclear disaster at reactor unit 4 at Chornobyl. This short document presents some of the images of the legacy of a disaster that persists today and which due to the hazards of radioactivity will stretch long into the future.

The name Chornobyl has resonated across the last decades, but for those not directly impacted by the radioactive legacy, it is not a constant thought. For those alive at the time, it seems impossible to believe it can be forgotten. For some more recently it has become a tourist destination to be ticked off on a list. But Chornobyl, one of the most radioactive places on planet earth, what it is and what it means, is not and never will be, Disneyland.

One of the locations that the Russian military seized on its first day of invasion, 24 February 2022, was the Chornobyl nuclear site. Close to the border of Belarus, it lies on a main route to Kyiv. In the days that followed, amidst all the terrible violence and destruction wrought by the Russian military attack across Ukraine, the world was also reminded that Chornobyl exists and that there are multiple radioactive hazards remaining. The people of Ukraine never forgot Chornobyl but it appears that some in the Russian military did or at least ignored the risks or did not care. The images of trenches inside the 30km exclusion zone around Chornobyl and constructed by Russian troops defies all logic and understanding - and yet. They are perhaps an appropriate metaphor for the nuclear amnesia that those promoting nuclear power would like us all to adopt. The efforts of the nuclear industry to promote nuclear energy as green, sustainable and a solution to the climate emergency is based on forgetting nuclear energy's realities. One concrete result are the efforts of the European Commission to include nuclear (along with gas) in its taxonomy under the label sustainable. The 49,000 citizens of Pripvat removed from their homes on the night of 27 April 1986, never to return, might have a different view. Likewise, the hundreds of thousands of people eventually displaced from villages and towns across Ukraine (as well as Belarus and Russia) or the millions who remain living in radioactive highly contaminated land in Ukraine and beyond.

Ignorance, deliberate obfuscation and distortion of reality is at the <u>core</u> of how the nuclear industry operates. It promises much but fails to deliver and all the time it relies on withholding vital information. It was how the Soviet government in Moscow failed to <u>disclose</u> the inherent design flaws in the RBMK reactor design that meant the Chornobyl disaster was inevitable. The half-life of radioactivity such as cesium, strontium and plutonium, runs in parallel to the <u>half truths</u> of the <u>nuclear industry</u>.

Never asked their views on nuclear energy were more than <u>600,000</u> liquidators who fought the battle of Chornobyl in the days, weeks and months of 1986. They and their families have spent decades seeking the <u>compensation</u> they deserve for deliberately being exposed to radiation while their medical records remain hidden and off limits by order of the Kremlin in Moscow.

The contrast and parallels between today and 1986 are profound. In 2022, the Kremlin sent its military to seize Chornobyl as part of their war to destroy Ukraine. In 1986 it sent hundreds of thousands of troops in an attempt to manage the nuclear disaster that threatened to destroy even larger areas of Ukraine and wider Europe. In efforts to prevent heavy radioactive fallout hitting Moscow, a <u>decision</u> was taken within a few days of the start of the 1986 disaster to <u>seed clouds</u> with silver iodide that led to high levels of radioactivity contaminating Belarus and southern Russia. The Kremlin did not inform the thousands of <u>people</u> in Kyiv who took part in the May day celebrations.

The photos here tell a story of suffering the consequences of decisions on energy and war taken by the Soviet government and the Russian government decades apart. Each have had enormous impacts on the lives of millions. As Chornobyl and the triple reactor meltdown at Fukushima Daiichi in Japan in 2011 show, nuclear power has too many risks to be an energy source that can be operated safely. It should have no role in our planetary battle to stop the worse scenarios of the climate crisis. Still multiple nuclear threats persist in Ukraine. While the Russian military occupation of the Chornobyl site ended on 31 March 2022, today, Europe's largest nuclear power plant at Zaporizhzia in southern Ukraine, remains under armed Russian military occupation. Officials from the Russian state nuclear corporation, ROSATOM, involved in the illegal seizure of the Chornobyl during March, also remain on the Zaporizhzia site. This is a unique event in the history of nuclear power, is an outrage and a direct threat to nuclear safety. The potential for a major nuclear disaster triggered by the Russian war on Ukraine at the six reactors at the Zaporizhzia site, and other operating reactors are even greater than that at Chornobyl. On this anniversary of the Chornobyl disaster, we pay our deepest respects to all its victims, and in particular to those in Ukraine.

Shaun Burnie

Senior Nuclear Specialist, Greenpeace East Asia

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^{* &#}x27;Chornobyl' is Ukrainian spelling of 'Chernobyl'

Cover image: A Ukrainian soldier stands against the background of a shelter above the sarcophagus covering the exploded reactor at the Chornobyl nuclear power plant in Ukraine, April 16, 2022.

© Efrem Lukatsky / ASSOCIATED PRESS / picture-alliance

Below: Servicemen of Ukrainian national guard patrol area near the Chornobyl nuclear power plant, one week after Russian military leave nuclear site, April 7, 2022.

© Gleb Garanich / REUTERS / picture-alliance







Above: A Ukrainian serviceman walks past an abandoned Russian's army military vehicle in a road near Chornobyl, Ukraine, April 5, 2022.

© Oleksandr Ratushniak / ASSOCIATED PRESS / picture-alliance

Preceding page, top: A dosimetrist measures the level of radiation around trenches dug by the Russian military in an area inside Chornobyl exclusion zone as Russia's attack on Ukraine continues, April 7, 2022.

© Gleb Garanich / REUTERS / picture-alliance

Preceding page, bottom: Trenches and firing positions sit in the highly radioactive soil adjacent to the Chornobyl nuclear power plant, Ukraine, April 16, 2022. Thousands of tanks and troops rumbled into the forested exclusion zone around the shuttered plant in the earliest hours of Russia's invasion of Ukraine in February, churning up highly contaminated soil from the site of the 1986 accident that was the world's worst nuclear disaster.

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Page 8-10: In April 2020 a forest fire burned near Krasiatychi town, in Kyiv region, Ukraine, 60km from the nuclear power plant. The fire in this forest was one of many in Ukraine in that period, due to Ukrainians' habit of setting dry grass on fire in spring to clear land for agriculture. One such fire had been burning for more than a week in the radioactive Chornobyl exclusion zone around the nuclear power plant, releasing radioactive dust into the air.

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A Christian cross and a nuclear radiation warning sign near abandoned buildings in the abandoned city of Pripyat, Ukraine, February 2016.

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Top: An abandoned amusement park in Pripyat, Ukraine, April 2016.

© Daniel Müller / Greenpeace

Bottom: Agricultural workers preparing for sowing wheat in Stary Vyshkov, a village contaminated by Chornobyl radiation, Ukraine, April 2016.

© Liza Udilova / Greenpeace



Preceding page: Patients in the local clinic in Novozybkov village, Ukraine. Local doctor Victor Khanaev, surgeon and member of the town's council, is sure that one third of his patients are suffering from diseases caused by high radiation levels.

© Liza Udilova / Greenpeace

Below: The abandoned city of Pripyat, Ukraine, February 2016.

© Denis Sinyakov / Greenpeace









Above: The nuclear power plant of Chornobyl before having the New Safe Confinement shield built over it, April 2016.

© Daniel Müller / Greenpeace

Preceding page, top: A sign board about the New Safe Confinement (NSC) in front of Chornobyl nuclear power plant, April 2016.

© Daniel Müller / Greenpeace

Preceding page, bottom: Abandoned buildings in Pripyat, Ukraine, February 2016.

© Denis Sinyakov / Greenpeace





Top: A family and their wagon full of locally grown potatoes, in Vezhytsia village, in the Rivne region in Ukraine, September 2015.

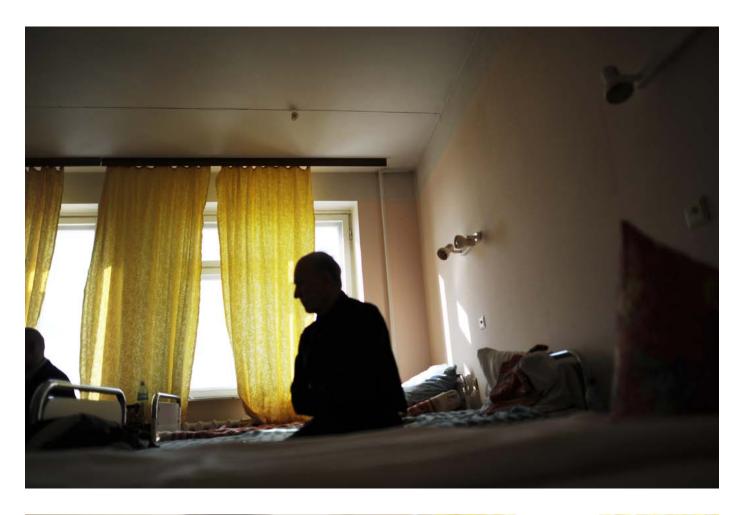
Bottom: In Novozybkov in the Bryansk region of Russia, residents sell local produce outside the local bazaar. Here the food doesn't pass radiation control checks. October 2015.

Both images © Denis Sinyakov / Greenpeace

Below: During the investigation tour for the 25th anniversary of the nuclear disaster, Greenpeace Germany's nuclear expert, Tobias Muenchmeyer, measures nuclear radiation at the New Safe Confinement sheild of Chornobyl nuclear power plant. March 2011.

© Jan Grarup / Noor / Greenpeace







Preceding page: Liquidators in the Research Centre for Radiation Medicine in Kyiv. 25 years after the Chornobyl nuclear accident, the liquidators who had worked cleaning up after the disaster are suffering from radiation related illnesses, March 2011.

© Jan Grarup / Noor / Greenpeace

Below: Woman in the Liquidators' Estate of Kyiv, 25 years after the nuclear accident at Chornobyl, March 2011.

© Jan Grarup / Noor / Greenpeace





Above: Funeral procession in Drozdyn village in the North West of Ukraine. Levels of radioactive particles in food, and especially milk is on average double the Ukrainian maximum allowed levels. March 2011.

© Robert Knoth / Greenpeace

Following page, top: Villagers discussing their situation in the house of the Bychkovskas, in the almost abandoned village of Rudnya Zherevetska. The village is situated close to the most contaminated Zone One, an area heavily polluted by the Chornobyl accident. People are not allowed to move into these areas, they can only leave. Many villages are slowly being abandoned and are slowly falling to ruin. March 2011.

© Robert Knoth / Greenpeace

Following page, bottom: People have returned to villages in the 30km exclusion zone of Chornobyl although radiation levels are still high. Mostly these are elderly people who wish to stay in their houses, like Maria (72). March 2011.

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Below: Women in the Komissarenko Institute of Endycronology and Metabolism of the Academy of Medical Sciences of Ukraine in Kyiv. 25 years after the nuclear accident in Chornobyl these women are suffering from thyroid disease. Some have to stay in hospital for long periods. March 2011.

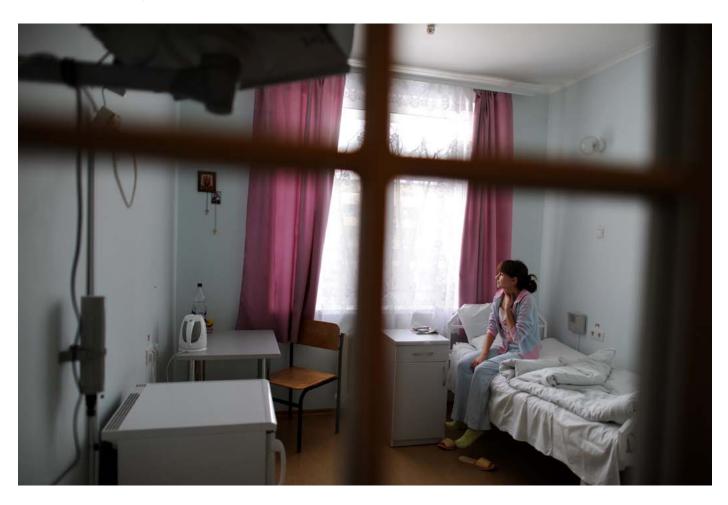
© Jan Grarup / Noor / Greenpeace

Following page, top: A few elderly people survive in the village of Bartolomeyka (Gomel region, Belarus) which is heavily contaminated by Chornobyl fallout. Caesium 137 radioactive contamination is approximately 70 Curie per square kilometer here, therefore the village was evacuated and most houses buried underground. Nevertheless some people returned with the wish to spend the rest of their life in their home. March 2005.

© Vaclav Vasku / Greenpeace

Following page, bottom: Abandoned baby shoes in Pripyat's kindergarten. Before the Chornobyl accident, the town of Pripyat was considered the "glory" of the former Soviet Union. More than 49,000 inhabitants lived there, less than 3km from Chornobyl nuclear power plant, with many of them employed directly by the power plant. July 2005.

© Vaclav Vasku / Greenpeace





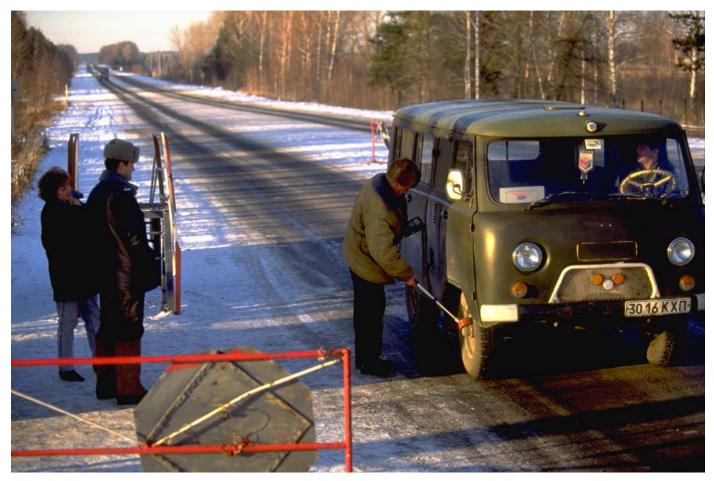


The 4th unit of Chornobyl nuclear power plant, December 1995.



The biggest dumping area of contaminated vehicles and helicopters used for combatting the catastrophe of Chornobyl, in Rassohka, Ukraine, December 1995.







Above: Chornobyl nuclear power plant. September 1996.

Preceding page, top: Pripyat, the deserted city a few kilometres from the Chornobyl nuclear power plant. The city was a "Soviet dream" with a sports stadium and swimming pool. December 1995.

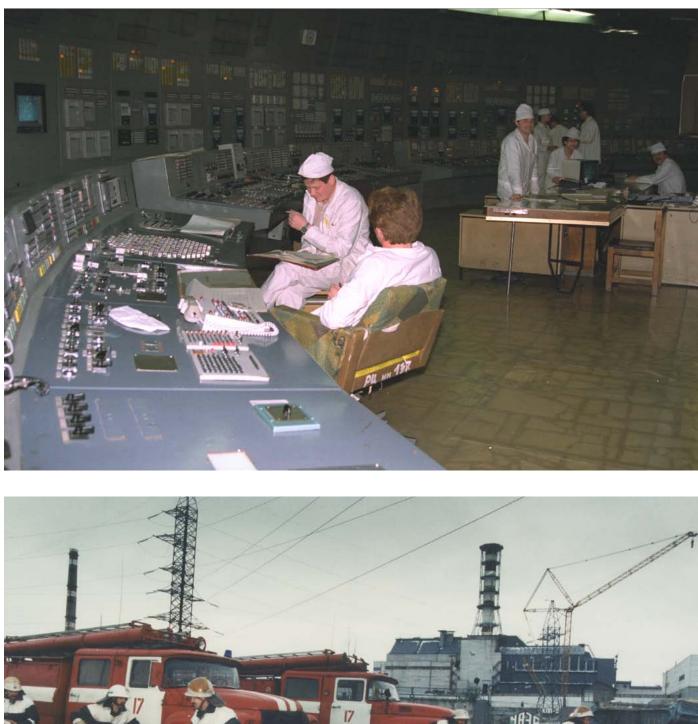
Preceding page, bottom: The border of the 30km exclusion zone around Chornobyl nuclear power plant. September 1996.

All images © Clive Shirley / Signum / Greenpeace



Chemistry laboratory in deserted secondary school, Illinsty, Ukraine. December 1995.

Inside the Chornobyl nuclear power plant in Ukraine. Workers in the "Golden Corridor" which joined the 4th reactor block which exploded in April 1986. November 1994.







Above: Blood test on a Ukranian child at the Kyiv Laboratory, Science Unit of Greenpeace International, Kyiv, USSR. The unit, staffed by a pediatrician and lab technicians, screened children for blood deficiencies, working closely with the local pediatric system which had been severely strained after the nuclear accident at Chornobyl in 1986. February 1991.

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Preceding page, top: Control room of reactor 3 at Chornobyl nuclear power plant, Ukraine. December 1992.

© Tim Lambon / Greenpeace

Preceding page, bottom: Fire drill in front of the confinement shield covering the 4th reactor block of Chornobyl nuclear power plant in Ukraine. November 1994.

Photos of the liquidators of the Chornobyl disaster, Ukraine, April 2006.

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Source: Atlas of Caesium deposition on Europe after the Chornobyl accident, Edith CRESSON, Member of the Commission responsible for Research, Innovation, Education, Training and Youth DGXII.

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Nuclear Fission Safety Programme (Radiation Protection) Office for Official Publications of the European Communities 1998.

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A TV monitor at Chornobyl's catastrophe museum in Kyiv broadcasts a documentary film about the "liquidators", some 600,000 front line soldiers, firemen and civilians who were deployed over four years to clean up after the Chornobyl nuclear meltdown. April 2006.

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GREENPEACE

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Chornobyl aftermath, December 1986.

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