**US Climate Video Script**

|  |  |
| --- | --- |
| **Speech** | **Image** |
| Over the past decades, humans have been emitting more and more fossil fuels like coal, gas or oil. Burning fossil fuels releases CO2 into the atmosphere. | Graph (if possible, animated) of historic CO2 concentration, next to polluting cars (cars with smoke), planes, and coal power plants / factories (e.g. using <https://www.temperaturerecord.org/> ) |
| Today, the concentration of CO2 in the atmosphere is higher than at any point in time over the last 800,000 years. | Unzoom to show graph of concentration over 800,000 years |
| And it’s the concentration of greenhouse gases like CO2 that drives global temperature. | Show graph of temperatures (e.g. using <https://www.temperaturerecord.org/> ) |
| Climate scientists agree: the build-up of greenhouse gases released by human activity in the atmosphere causes climate change. |  |
| A rapid transition away from fossil fuels is possible and could contain global warming below +2°C, meaning 3.6 °F. | Extends graph of temperatures with 2°C scenario (e.g. using the figure below), and some windpanels and trees on the side |
| But if greenhouse gas emissions continue on their current trend, the average global warming will be +8°F in 2100 and +13°F in 2200. | Keep previous graph but adds a +4°C scenario (e.g. using the figure below), and on the side now there is a polluting car and a coal power plant / factory |
| This may seem far away, but climate change is already affecting us right now in the places where we live.  - Because of climate change, in the US hurricanes have become increasingly intense and cause much more harm and damages. Hurricane Katrina caused more than 1,800 deaths and more than 100 billion dollars in damages. | Shows a hurricane / a storm that tear off a roof and a palm tree. |
| * The amount of air pollution generated by burning fossil fuels is already responsible for 200,000 deaths in the US each year[[1]](#footnote-1) | Shows a polluting car then a skull with “200,000”. |
| * Heatwaves are becoming longer, more frequent and more severe.   In the absence of ambitious action against climate change,[[2]](#footnote-2) the US will experience 70 days of extreme heat per year (that is six times more than in the past) and up to 135 days a year in a State like Texas. | **Shows a desert with someone sweating more and more.** |
| * In the South and in the Midwest, agricultural yields will decrease because of the heat. | **Shows a corn field with some visible cobs and some cobs dry up or disappear. (It could be bananas, tomatoes or else instead of corn).** |
| * With the mix of more hurricanes, rising sea levels, more heatwaves, and lower agricultural output, the average income in Southern states will be 10 to 20% lower than it could be.[[3]](#footnote-3) | **Shows a farmer with money, then with less money.** |
| * In the North-East, the risk of heavy rain has already increased by 55%. More severe storms and rising sea levels will lead to more flooding | **Shows a coast with sea-level rise, a storm, and a flood.** |
| * In the West, hotter and drier conditions are causing more wildfires. Since the mid 80s, the area burned by wildfires across the Western US is estimated to have been twice what it would have been without climate change. This was even before accounting for the California wildfires last summer, which were by far the largest on record.[[4]](#footnote-4) | **Shows a forest fire.** |
| To tackle climate change, we need to bring greenhouse gas emissions close to zero. This is possible, but it requires a deep transformation in the sectors most responsible for emissions: energy, transport, and industry. | Shows the second figure below. |

**France Climate Video Script**

|  |  |
| --- | --- |
| **Speech** | **Image** |
| Au cours des dernières décennies, les humains ont brûlé de plus en plus de combustibles fossiles comme le charbon, le gaz ou le pétrole. Or, la combustion des combustibles fossiles libère du CO2 dans l'atmosphère. | Graph (if possible, animated) of historic CO2 concentration, next to polluting cars (cars with smoke), planes, and coal power plants / factories (e.g. using <https://www.temperaturerecord.org/> ) |
| Aujourd'hui, la concentration de CO2 dans l'atmosphère n’a jamais été aussi élevée depuis 800 000 ans. | Unzoom to show graph of concentration over 800,000 years |
| Les climatologues sont d'accord : c'est l'accumulation dans l'atmosphère de gaz à effet de serre comme le CO2 émis par les activités humaines qui augmente les températures et provoque le changement climatique. | Show graph of temperatures (e.g. using <https://www.temperaturerecord.org/> ) |
| Une transition rapide vers une société sans combustible fossile est techniquement possible et pourrait contenir l'augmentation de la température du réchauffement climatique à 2°C. | Extends graph of temperatures with 2°C scenario (e.g. using the figure below), and some windpanels and trees on the side |
| Mais si les émissions de gaz à effet de serre continuent sur leur tendance actuelle, l’augmentation de la température mondiale sera de 4 °C en 2100 et de 7 °C en 2200. | Keep previous graph but adds a +4°C scenario (e.g. using the figure below), and on the side now there is a polluting car and a coal power plant / factory |
| Cela peut sembler lointain, mais le changement climatique nous affecte déjà chez nous aujourd’hui.  - Le moustique tigre est déjà présent sur la moitié du territoire. | Shows mosquitos biting. |
| * L’enneigement moyen a déjà été réduit de 40cm dans certaines stations de ski.[[5]](#footnote-5) | Shows a mountain with snow melting |
| * La pollution atmosphérique générée par la combustion de fossiles est déjà responsable de 48 000 décès par an en France. | Shows a skull with “48,000”, then a desert with a shrub drying. |
| En l'absence de mesures ambitieuses pour stopper le changement climatique, les impacts attendus par les scientifiques seront bien pires : | The thermometer rises between 3 and 4°C (color red) |
| * D’ici 2050, les étés normaux seront aussi chauds que la canicule de 2003 (qui avait entraîné 20 000 morts),[[6]](#footnote-6) et les records de températures pourront atteindre 50°C, notamment dans l’Est.[[7]](#footnote-7) | Shows a desert with someone sweating more and more. |
| * À cause de la chaleur et de la sécheresse, la moitié des forêts de la métropole vont être soumis à un risque d’incendie élevé. | Shows a forest fire. |
| * Sous l’effet de la montée des eaux et de tempêtes plus violentes, les inondations et les submersions vont augmenter de 40 à 80%.[[8]](#footnote-8) | Shows a house near a beach, the sea-level rises (shrinking the size of the beach), then a waves comes and floods the house |
| *Pour arrêter le changement climatique, nous devons ramener les émissions à zéro dans les prochaines décennies. C’est possible, mais cela nécessite une transformation profonde des secteurs les plus responsables des émissions de gaz à effet de serre : l'énergie, les transports et l'industrie.* | *Shows the second figure below.* |

**Denmark Climate Video Script**

|  |  |
| --- | --- |
| **Speech** | **Image** |
| Over the past decades, humans have been emitting more and more fossil fuels like coal, gas or oil. Burning fossil fuels releases CO2 into the atmosphere. | Graph (if possible, animated) of historic CO2 concentration, next to polluting cars (cars with smoke), planes, and coal power plants / factories (e.g. using <https://www.temperaturerecord.org/> ) |
| Today, the concentration of CO2 in the atmosphere is higher than at any point in time over the last 800,000 years. | Unzoom to show graph of concentration over 800,000 years |
| And it’s the concentration of greenhouse gases like CO2 that drives global temperature. | Show graph of temperatures (e.g. using <https://www.temperaturerecord.org/> ) |
| Climate scientists agree: the build-up of greenhouse gases released by human activity in the atmosphere causes climate change. |  |
| A rapid transition away from fossil fuels is possible and could contain global warming below +2°C. | Extends graph of temperatures with 2°C scenario (e.g. using the figure below), and some windpanels and trees on the side |
| But if greenhouse gas emissions continue on their current trend, the average global warming will be +4°C in 2100 and +7°C in 2200. | Keep previous graph but adds a +4°C scenario (e.g. using the figure below), and on the side now there is a polluting car and a coal power plant / factory |
| This may seem far away, but climate change is already affecting us right now in the places where we live.   * Due to climate change, the sea level is rising. With its 7,300 km of coast, Denmark is particularly vulnerable to sea level rise. Actually, it is the European country with the largest costs per capita from sea level rise.[[9]](#footnote-9) | Shows a coast with sea-level rise and a flood. |
| * Moreover, climate change may bring up to 40% more rain to Denmark in winter.[[10]](#footnote-10) Together with sea-level rise, increased precipitation will cause erosion and flooding of low-lying coasts and river valleys. | Adds rain to the previous picture, and sea level rises even more. |
| * Climate change will also disrupt ecosystems: most species will migrate to the North, some will disappear. And we expect more oxygen depletion in Danish waters, which will damage marine ecosystems. | Shows a beach with birds where the water becomes green and many algae appear on the sand, then the birds fly away. |
| * The amount air pollution generated by burning of fossil fuels is already responsible for 1,500 deaths in Denmark each year.[[11]](#footnote-11) | Shows a polluting car then a skull with “1,500”. |
| To tackle climate change, we would need to bring greenhouse gas emissions close to zero. This is possible, but requires a deep transformation in the sectors most responsible for these emissions: energy, transport, and industry. | Shows the second figure below. |

**India Climate Video Script**

|  |  |
| --- | --- |
| **Speech** | **Image** |
| Over the past decades, humans have been emitting more and more fossil fuels like coal, gas or oil. Burning fossil fuels releases CO2 into the atmosphere. | Graph (if possible, animated) of historic CO2 concentration, next to polluting cars (cars with smoke), planes, and coal power plants / factories (e.g. using <https://www.temperaturerecord.org/> ) |
| Today, the concentration of CO2 in the atmosphere is higher than at any point in time over the last 800,000 years. | Unzoom to show graph of concentration over 800,000 years |
| And it’s the concentration of greenhouse gases like CO2 that drives global temperature. | Show graph of temperatures (e.g. using <https://www.temperaturerecord.org/> ) |
| Climate scientists agree: the build-up of greenhouse gases released by human activity in the atmosphere causes climate change. |  |
| A rapid transition away from fossil fuels is possible and could contain global warming below +2°C. | Extends graph of temperatures with 2°C scenario (e.g. using the figure below), and some windpanels and trees on the side |
| But if greenhouse gas emissions continue on their current trend, the average global warming will be +4°C in 2100 and +7°C in 2200. | Keep previous graph but adds a +4°C scenario (e.g. using the figure below), and on the side now there is a polluting car and a coal power plant / factory |
| This may seem far away, but climate change is already affecting us right now in the places where we live.   * Heatwaves are lasting longer, and are more frequent and more severe: thermometers hit 48 °C in Delhi in 2019,[[12]](#footnote-12) and 11 out of the 15 warmest years have occurred within the last 15 years.[[13]](#footnote-13) Temperatures will increase even further with climate change, up to the point that some regions may become inhabitable because of extreme heat.[[14]](#footnote-14) | Shows a desert with someone sweating more and more. Shows a thermometer than goes up to 48 °C. |
| * Dry years are expected to be drier and wet years wetter. An abrupt change in monsoons could cause a major crisis, triggering more frequent droughts as well as greater flooding in large parts of India.[[15]](#footnote-15) | Shows a drought. And shows a storm. |
| * 36 million people will live in a zone that is flooded annually in 2050.[[16]](#footnote-16) Kolkata and Mumbai are particularly vulnerable to the impacts of rising sea levels, tropical cyclones, and riverine flooding. | Shows a house near a beach, the sea-level rises (shrinking the size of the beach), then a waves comes and floods the house |
| * The amount of air pollution generated by burning of fossil fuels is already responsible for 700,000 deaths in India each year. [[17]](#footnote-17) | Shows a polluting car then a skull with “700,000”. |
| * Due to climate change, rice and wheat yields are expected to become 15 to 20% lower than what they would otherwise be.[[18]](#footnote-18) | Shows a wheat field with some visible wheat plants dry up or disappear. |
| To tackle climate change, we would need to bring greenhouse gas emissions close to zero. This is possible, but requires a deep transformation in the sectors most responsible for these emissions: energy, transport, and industry. | Shows the second figure below. |

**Spain Climate Video Script**

|  |  |
| --- | --- |
| **Speech** | **Image** |
| En las últimas décadas, el ser humano ha quemado cada vez más combustibles fósiles como el carbón, el gas y el petróleo. La quema de estos combustibles fósiles libera CO2 a la atmósfera. | Graph (if possible, animated) of historic CO2 concentration, next to polluting cars (cars with smoke), planes, and coal power plants / factories (e.g. using <https://www.temperaturerecord.org/> ) |
| Actualmente, la concentración de CO2 en la atmósfera es la más alta de los últimos 800.000 años. | Unzoom to show graph of concentration over 800,000 years |
| Y es la concentración de gases de efecto invernadero como el CO2 lo que impulsa la temperatura global.  *And it’s the concentration of greenhouse gases like CO2 that drives global temperature*. | Show graph of temperatures (e.g. using <https://www.temperaturerecord.org/> ) |
| Los científicos están de acuerdo: la acumulación de gases de efecto invernadero liberados por la actividad humana en la atmósfera provoca el cambio climático. |  |
| Una rápida transición hacia una sociedad sin combustibles fósiles es técnicamente posible y podría contener el calentamiento global por debajo de +2C. | Extends graph of temperatures with 2°C scenario (e.g. using the figure below), and some windpanels and trees on the side |
| Pero si las emisiones de gases de efecto invernadero mantienen su tendencia actual, el calentamiento medio del planeta será de +4°C en 2100 y de +7°C en 2200. | Keep previous graph but adds a +4°C scenario (e.g. using the figure below), and on the side now there is a polluting car and a coal power plant / factory |
| * En este escenario, todo el sur de España se convertirá en un desierto a finales de siglo. [[19]](#footnote-19) * En este escenario, el 80% del territorio español podría estar en riesgo de desertificación a finales de siglo. | Shows a desert with someone sweating more and more. Shows a thermometer than goes up to 48 °C. |
| Esto puede parecer lejano, pero el cambio climático ya nos está afectando hoy en día.   * Por ejemplo, las olas de calor son más intensas, bruscas y duraderas. En España, en esta última década, se han casi duplicado el número de olas de calor en relación a décadas anteriores[[20]](#footnote-21) | Shows a drought. And shows a storm. |
| * Las condiciones de calor y sequedad están provocando más incendios forestales y España se encuentra entre los tres países europeos con mayor peligro[[21]](#footnote-23). | Shows a forest burning. |
| * Debido al aumento de las temperaturas, la frecuencia e intensidad de inundaciones por deshielo también está aumentando en algunas regiones[[22]](#footnote-24). | Shows a house near a **river** ~~beach~~, **the river-level rises then a waves comes and floods the house** |
| * La desertificación, las inundaciones y las sequías afectan negativamente a la productividad de los cultivos y ponen en riesgo al sector agrario español, un sector con gran importancia económica, social, territorial y medioambiental[[23]](#footnote-25). | **Shows a field with some visible cobs and some cobs dry up or disappear.** |
| * El 11% de los españoles mayores de 14 años (alrededor de 45.000 personas) fallece debido a la contaminación derivada de los combustibles fósiles [[24]](#footnote-26) | Shows a polluting car then a skull with “15,000”. |
|  |  |
| * Para detener el cambio climático, tenemos que reducir las emisiones a cero en las próximas décadas. Esto es posible, pero requiere una transformación profunda de los sectores más responsables de las emisiones de gases de efecto invernadero: energía, transporte e industria. | Shows the second figure below. |

**Referencias sobre incendios forestales en España**

<https://s03.s3c.es/imag/doc/2021-02-03/Miteco-Impacto-cambio-climatico-espana.pdf>

El incremento de la matorralización de las últimas décadas en los pastos de montaña supra-forestales, debido a la disminución de la carga ganadera, aumenta la vulnerabilidad de estos sistemas a los incendios, que se prevén más recurrentes debido a los efectos del cambio climático.

**Moreno et al. (2014),** estudiando los motores de los incendios en el periodo 1968-2010, observan que las variables climáticas son uno de los motores del incremento de los incendios observados en todas las regiones.

El cambio climático facilitará la predisposición del combustible a arder y, en consecuencia, a una mayor incidencia de la casuística, incluso en lugares remotos donde con anterioridad los incendios no se propagaban con excesiva continuidad **(Moreno, 2016)**

Considerando los posibles efectos climáticos en los incendios forestales en un escenario de cambio climático RCP 8.5, **De Rigo et al. (2017)** predicen, incluso a corto plazo, que en todos los modelos utilizados encuentran un mayor riesgo de incendio en prácticamente toda la Península Ibérica. Si bien existe cierta incertidumbre sobre la magnitud del efecto del cambio climático, está claro que el peligro de incendios forestales provocados por el clima aumenta con el cambio climático en todo el Mediterráneo.

**De Rigo et al. (2017):** <https://www.eea.europa.eu/data-and-maps/indicators/forest-fire-danger-3/de-rigo-et-al-2017>

Whilst there is some uncertainty in the magnitude of the effect of climate change, it is clear that the danger of forest fires driven by weather increases with climate change around the Mediterranean (Figure 3). The three countries with the highest danger are Spain, Portugal and Turkey.

In Spain, **De Luı́s et al.** suggest that a decrease in the average annual precipitation may have increased the fire frequency and the areas of higher fire danger, with potential repercussions on soil degradation and desertification patterns

1. Lelieveld et al. (2019) [↑](#footnote-ref-1)
2. http://www.impactlab.org/map/#usmeas=absolute&usyear=1981-2010&gmeas=change-from-hist&gyear=2080-2099&tab=global&gvar=tasmax-over-95F [↑](#footnote-ref-2)
3. http://www.impactlab.org/research/estimating-economic-damage-from-climate-change-in-the-united-states/ [↑](#footnote-ref-3)
4. https://youtu.be/wd6w6mTQGwc?t=461 [↑](#footnote-ref-4)
5. https://www.ecologie.gouv.fr/observatoire-national-sur-effets-du-rechauffement-climatique-onerc [↑](#footnote-ref-5)
6. <https://www.institutdesactuaires.com/global/gene/link.php?doc_id=867&fg=1> <https://twitter.com/meteofrance/status/1173872094469402624?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E1173872094469402624%7Ctwgr%5E%7Ctwcon%5Es1_&ref_url=https%3A%2F%2Fwww.leparisien.fr%2Fenvironnement%2Fle-rechauffement-climatique-sera-beaucoup-plus-fort-que-prevu-17-09-2019-8153628.php>

   https://www.euro.who.int/\_\_data/assets/pdf\_file/0018/112473/E91350.pdf (https://www.liberation.fr/checknews/2018/08/06/combien-de-morts-y-avait-t-il-eu-lors-de-la-canicule-en-2003\_1671066) [↑](#footnote-ref-6)
7. http://www.meteofrance.fr/actualites/75746838-changement-climatique-8-aout-2030-le-mercure-pourrait-localement-depasser-les-50-c [↑](#footnote-ref-7)
8. https://www.ccr.fr/documents/35794/35836/Etude+Climatique+2018+version+complete.pdf/6a7b6120-7050-ff2e-4aa9-89e80c1e30f2?t=1536662736000 [↑](#footnote-ref-8)
9. Hinkel et al. 2010 [↑](#footnote-ref-9)
10. https://en.klimatilpasning.dk/sectors/nature/climate-change-impact-on-nature/ [↑](#footnote-ref-10)
11. https://www.statista.com/statistics/827754/air-pollution-deaths-denmark/#:~:text=Deaths%20attributable%20to%20air%20pollution%20in%20Denmark1990%2D2019&text=Over%20the%20past%20three%20decades,1990%20to%201%2C470%20by%202019. [↑](#footnote-ref-11)
12. https://www.ndtv.com/delhi-news/delhi-weather-delhi-at-48-degrees-highest-ever-in-june-says-weather-agency-skymet-2051014 [↑](#footnote-ref-12)
13. https://thewire.in/environment/2018-was-sixth-warmest-year-in-indias-recorded-history-imd [↑](#footnote-ref-13)
14. Im et al. (2017) [↑](#footnote-ref-14)
15. https://www.worldbank.org/en/news/feature/2013/06/19/india-climate-change-impacts [↑](#footnote-ref-15)
16. Kulp & Strauss (2019). https://en.wikipedia.org/wiki/Effects\_of\_climate\_change\_on\_South\_Asia#:~:text=Heat%20waves'%20frequency%20and%20power,accessing%20the%20closest%20water%20source. [↑](#footnote-ref-16)
17. Lelieveld et al. (2019) [↑](#footnote-ref-17)
18. <http://www.indianjournals.com/ijor.aspx?target=ijor:aerr&volume=27&issue=2&article=001> <https://link.springer.com/article/10.1007/s10584-011-0208-4> <https://www.int-res.com/abstracts/cr/v59/n3/p173-187/> [↑](#footnote-ref-18)
19. Guiot & Cramer (2016) Precipitations will decrease by 30% (Forzieri et al., 2014) [↑](#footnote-ref-19)
20. Aemet (2020): <http://www.aemet.es/en/noticias/2020/09/olas_de_calor_duplicadas_esta_ultima_decada> and <http://www.aemet.es/documentos/es/conocermas/recursos_en_linea/publicaciones_y_estudios/estudios/Olas_calor/Olas_Calor_ActualizacionMarzo2020.pdf> [↑](#footnote-ref-21)
21. De Rigo et al. (2017) [↑](#footnote-ref-23)
22. Ebro Resilience (2020) [↑](#footnote-ref-24)
23. <http://oa.upm.es/12061/2/INVE_MEM_2011_108790.pdf> and <https://www.pwc.es/es/publicaciones/assets/informe-sector-agricola-espanol.pdf> and <https://s03.s3c.es/imag/doc/2021-02-03/Miteco-Impacto-cambio-climatico-espana.pdf> [↑](#footnote-ref-25)
24. <https://www.europapress.es/sociedad/medio-ambiente-00647/noticia-107-espanoles-mayores-14-anos-fallece-causa-contaminacion-derivada-combustibles-fosiles-20210209122437.html> [↑](#footnote-ref-26)