**Structured Walkthrough (following the talk’s logic)**

**1) Opening & speaker context — why “health-centred climate action”**

* UCL Lunch Hour Lecture. Speaker: **Dr Marina Romanello**, Executive Director of **The Lancet Countdown**, joining live from COP in Azerbaijan. The Countdown is a global, multidisciplinary collaboration reporting annually ahead of COP on health–climate progress.

**2) What the Lancet Countdown is and tracks**

* Born after Paris 2016 and the second Lancet Commission’s conclusion: **climate change is the biggest global health threat**, but acting through a health lens could yield **the century’s largest health opportunity**. Each year the team reports on **~150+ indicators** across hazards, exposures, impacts, adaptation readiness, mitigation and health co-benefits, economics, and societal attention to a “health-first” narrative.

**3) This year’s overall headline**

* **Bad news:** across hazard/exposure/impact indicators, **most worsened**, with many reaching new records in **2023**.
* **Good news:** meaningful **signals of progress** are emerging (see §7).

**4) Evidence modules**

**4.1 Heat & health — direct and indirect hits**

* **Heat mortality (65+):** up **167%** since the 1990s; climate change drives the bulk of the rise. Vulnerable groups include infants, those with chronic conditions, pregnant women, and people with mental-health risks.
* **Safe physical activity time is shrinking:** in **2023**, each person faced **1,512 hours/year** when even light outdoor activity carried at least **moderate heat-stress risk** (**~+30% vs 1990**).
* **Labour & income losses:** **512 billion** potential work-hours lost in 2023 (~**+50%** vs 1990s), translating to **US$ 835 billion** potential income lost; **low-HDI countries** lose on average **7.6% of GDP**, with agriculture hit hardest.
* **Compound food and water risks:** by **2022**, **151 million** more people reported moderate/severe **food insecurity** than in 1981–2010; **61%** of global land saw **more extreme-precipitation days** in the last decade.

**4.2 Why the “fire keeps being fueled”: systems raising risk**

* **Natural carbon sinks lost; diets matter:** since 2001 the world lost **459 million ha** of tree cover (**11.5%**). Agricultural emissions **+2.9% (2016→2021)**, driven by **red meat/dairy**; deaths from **excess red-meat intake** rose (14→16 per 100,000), while a **healthy low-carbon diet** could **avoid ~11.2 million deaths/year**.
* **Energy system’s double problem:** energy contributes **> 2/3** of GHGs; **2023** energy-sector emissions hit an **all-time high**. **~2.4 billion** people still rely on **dirty fuels**; ~**30%** of households burn biomass; in low-HDI countries **~92%** of energy comes from biomass—driving **indoor air-pollution deaths (2.3 million in 2020, 65 countries)**.
* **Perverse incentives & stranded assets:** **84% of 86 countries** subsidised fossil fuels in **2022**, totalling **US$ 1.4 trillion**; in **30%** of countries, **subsidies exceeded total health budgets**. **114** major oil & gas firms plan output incompatible with **1.5 °C** (emissions **189%** of a 1.5-path by **2040**). Fossil fuels drew **37% of global energy investment in 2023**; coal power **stranded assets** projected at **US$ 164 billion (2025–2034)**. Political salience slid: UNGA leaders referencing health–climate links fell **50%→35% (2022→2023)**.

**5) “Compound exposure” is the real world**

* Heat waves, extreme rain/floods, drought, and infectious-disease risks **stack** in the same places at the same time, **overloading health systems** and worsening outcomes.

**6) The health-economics case**

* The **macroeconomic costs of inaction** are vast (labour/income losses are only the visible chunk). The case is to **measure climate action by health and wellbeing**, and to finance a **just transition** accordingly.

**7) Positive signals (the opportunity window)**

* **Clean energy adoption rising;** **low-carbon jobs now exceed fossil-fuel direct jobs.**
* **Air-pollution deaths (from fossil fuels) fell ~7% (2016–2021)**; **59%** of that decline was from **coal reductions**. Rapid fossil phase-down could **avoid ~4 million** more deaths (indoor+outdoor).
* **Health-sector engagement surging:** more countries join **WHO ATACH**; **vulnerability/adaptation assessments** grew **11→50 (2022→2023)**; countries with **health adaptation plans** rose **4%→43%**. Research outputs and climate content in public-health education are also increasing (but uneven by region).

**8) Action list (her “what to do”)**

* **Put health in 2025 NDCs** as a top-line goal/metric.
* **Redirect fossil-fuel subsidies (US$ 1.4 trn)** into actions with **health gains**.
* Make **health & equity** the core of a **Just Transition**.
* Build **low-carbon, climate-resilient health systems**.
* Drive **healthy low-carbon diets**, **clean energy** and **air-quality standards**, and **safe active travel**.

**9) Q&A highlights (useful for group discussion)**

* **Mental health:** systems are **least prepared**; evidence from Australia suggests **+1.2%** adolescent emergency visits & suicide/attempts **per +1 °C**.
* **Children & intergenerational equity:** climate hazards across the life course demand child-sensitive indicators; today’s choices set their lifelong risk profile.
* **Loss & damage:** health is gaining visibility as **non-economic loss**, pushed by the most vulnerable countries—but still under-weighted.
* **Collaboration lesson:** **impact-oriented science** that translates into action sustains a 300-researcher network’s motivation and longevity.