

Where Emissions Live in the Animation Pipeline

● VERY HIGH EMISSIONS

- 3D rendering and cloud computing
- VFX simulations (fluids, crowds, destruction)
- Large-scale data centre processing

● HIGH EMISSIONS

- Artist workstations (modelling, animation, rendering prep)
- Data storage and file transfer systems
- Re-render cycles and iterative revisions
- AI tools and inference (impact varies significantly by tool, scale, and data centre location — currently difficult to measure)

● MEDIUM EMISSIONS

- Office energy use (lighting, heating, cooling)
- Motion capture and processing
- Business travel and client collaboration

● LOWER EMISSIONS

- 2D animation pipelines
- Pre-production (storyboarding and design)
- Stop motion production (lower compute, higher material footprint)

OUTSIDE THE PIPELINE

Hardware manufacturing and disposal (“embodied carbon”) often rivals lifetime operational emissions, but is not captured in standard production carbon accounting.