

# MARINE PLASTIC POLLUTION

## WHAT ARE THE BENEFITS OF INTERNATIONAL COOPERATION?

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Plastic pollution threatens marine ecosystems and biodiversity **globally**

Marine plastic pollution is **mobile**

Potential gains from **international cooperation**



Source: The Ocean Cleanup

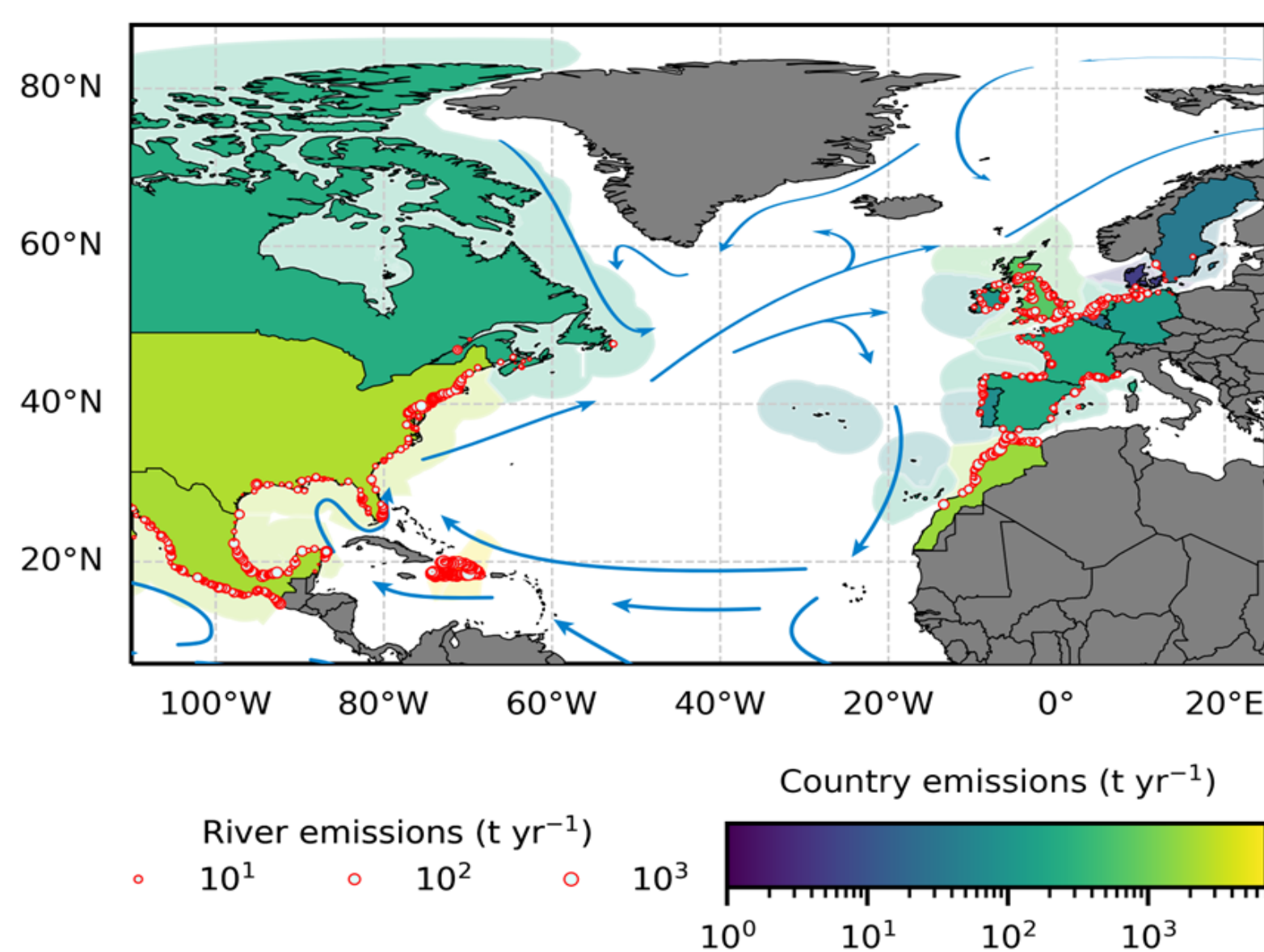
### QUESTIONS

How does plastic **transfer** between countries?

What are the **economic benefits (\$/£/€)** of international cooperation in marine plastic reduction?

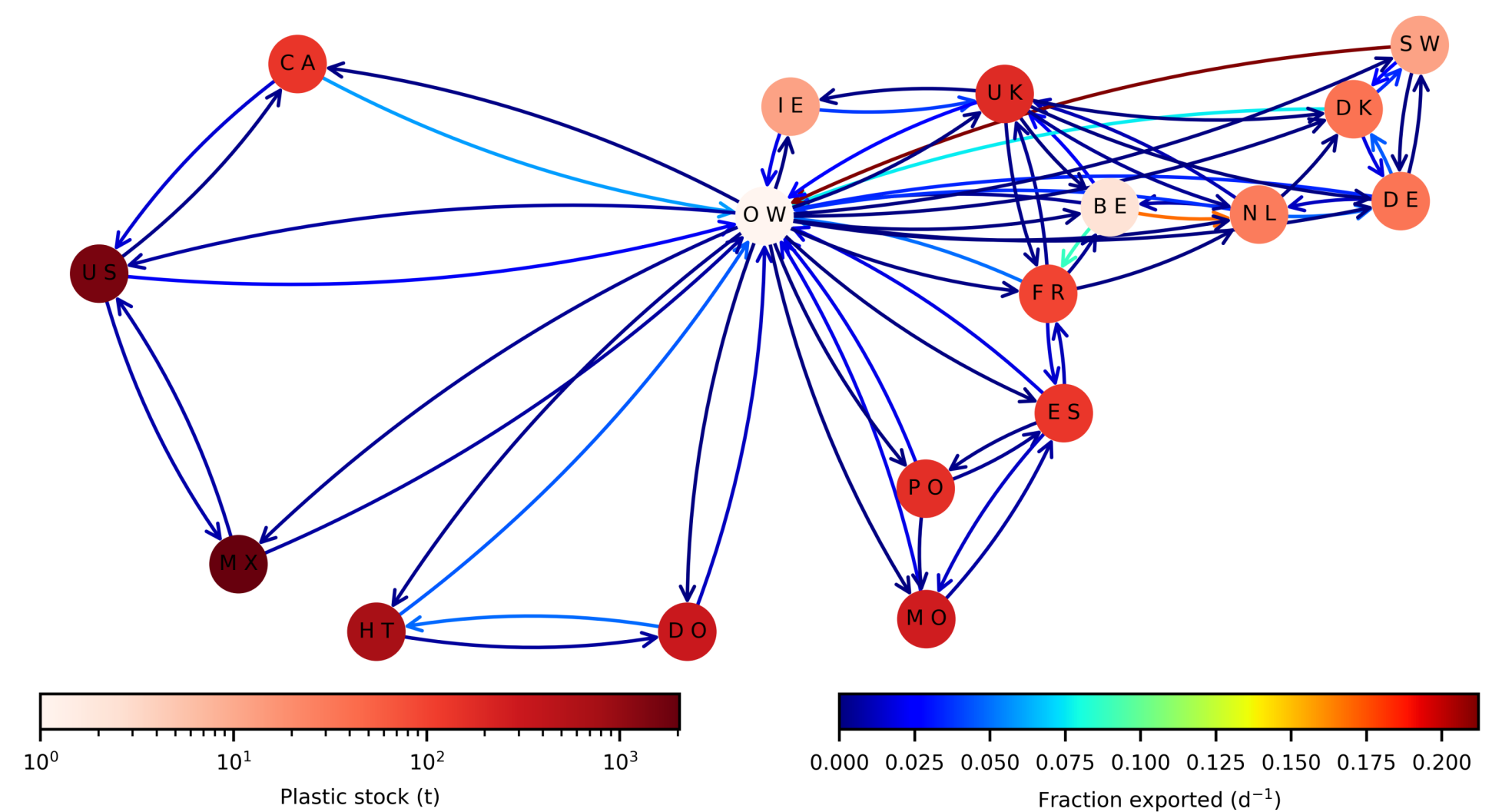
How are the benefits **distributed** between countries?

### MATERIALS & METHODS



**Exclusive Economic Zones (EEZ), river emissions and ocean currents affecting transfer dynamics surface ocean plastic in North Atlantic**

### Stocks and flows of plastic within and between the EEZs of countries in the North Atlantic



### RESULTS & DISCUSSION

Substantial plastic pollution reductions from international cooperation, but **uneven distribution of burden**

**Constraining agreement** results in less reductions and lower economic benefits

Cooperation **critical determinant** of success global plastic treaty

### Economic value countries gain (% total WTP)

Vertical red bar: Total value across all countries

