



Environmental Commission

RECOMMENDATIONS TO COUNCIL

MAY 18, 2021

ABOUT THE ENVIROMENTAL COMMISSION

- **FORMED BY**
Chapter 2, Article V, Section 2-96 of the LFUCG Code of Ordinances
- **ADVISES**
The mayor, the council, the planning commission, and all other appropriate bodies concerning the environment and environmental policies of the community.
- **38 COMMISSIONERS**
Representing all districts of Lexington/Fayette County.

● DEVELOP

a sustainability plan focusing on Lexington's contribution to carbon emissions and climate change and update and implement the *Empower Lexington Plan*

● REDUCE

waste by focusing on reducing use of single-use plastics

COMMISSION'S
CURRENT
OBJECTIVES

EMPOWER LEXINGTON

Mayor's Initiative
US Conference of Mayors:
Climate Protection Agreement

LFUCG + Community Input
LFUCG, Businesses, Utilities, Trade
Groups, Schools and Universities,
Community Advocacy Groups
represented by 50 participants

2005

2008

2012

Citizen Concern

Council's
"City for Climate
Protection Program"

Council adopted
resolution
supporting
*Empower Lexington
Plan*

THE PLAN'S FIVE SECTORS



1. Residential
2. Transportation
3. Industrial/Commercial/Institutional
4. Land Use/Food/Agriculture
5. Waste



❖ PLEASE REFER TO TWO-PAGE SUMMARY
and see <https://lfucgec.org>

RATIONALE



THE PUBLIC RECOGNIZES IMPORTANCE OF REDUCING GREENHOUSE GAS EMISSIONS and ENERGY USE

- Environmental Commission
- University of Kentucky
- Bluegrass GreenSource
- Solarize Lexington

| SAVE MONEY BY REDUCING ENERGY USE |

SURVEY OF PUBLIC OPINION

Estimated % of Adults Who Think Global Warming is Happening, 2020



Fayette County, Kentucky

50%

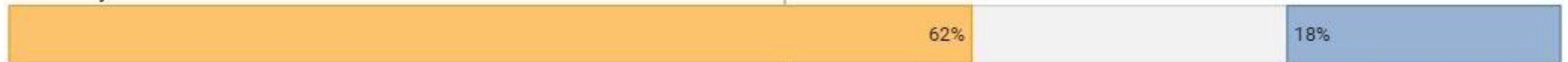


Yes

No

Kentucky

62%

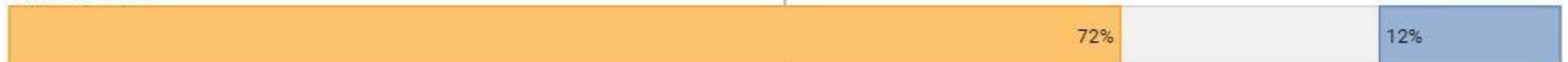


Yes

No

United States

72%

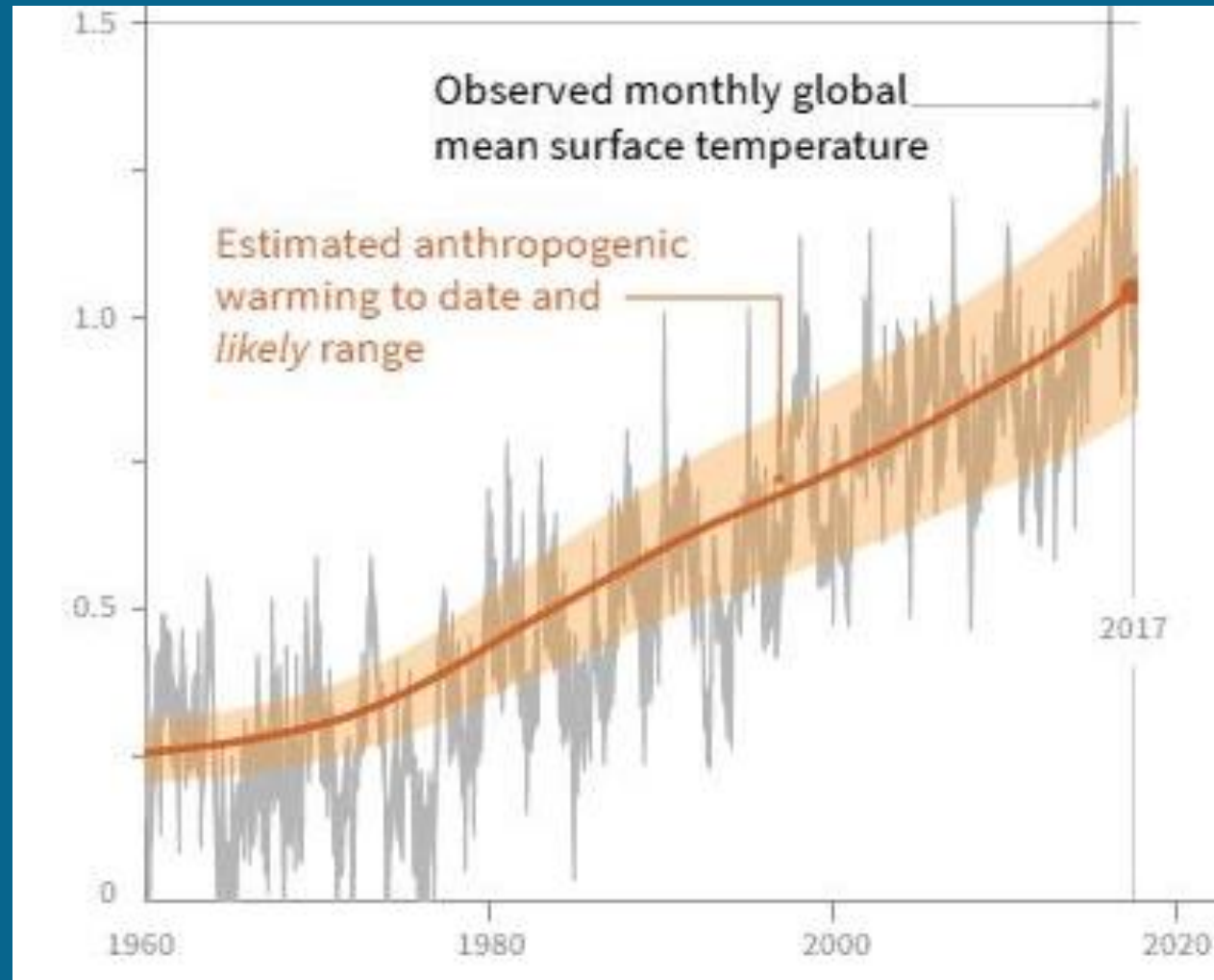


Yes

No

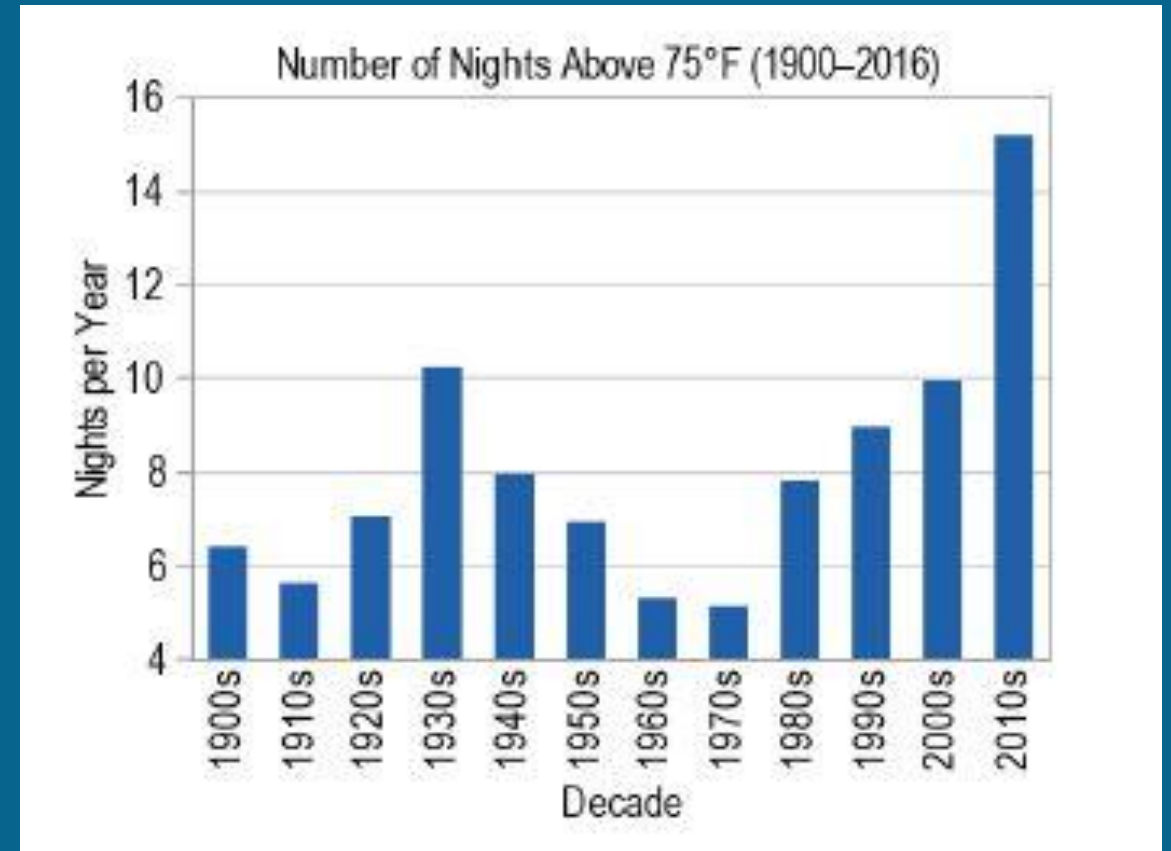
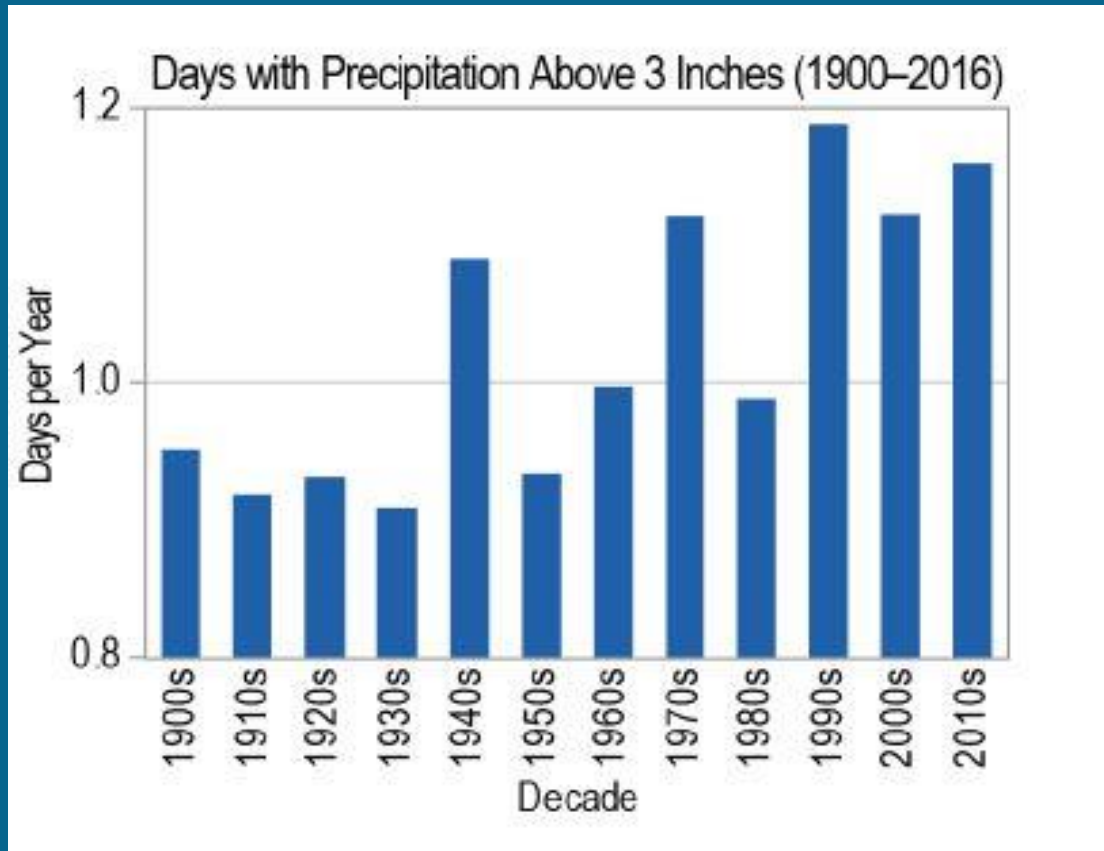
Source: Yale Program on Climate Change Communication

INCREASING GLOBAL SURFACE TEMPERATURES



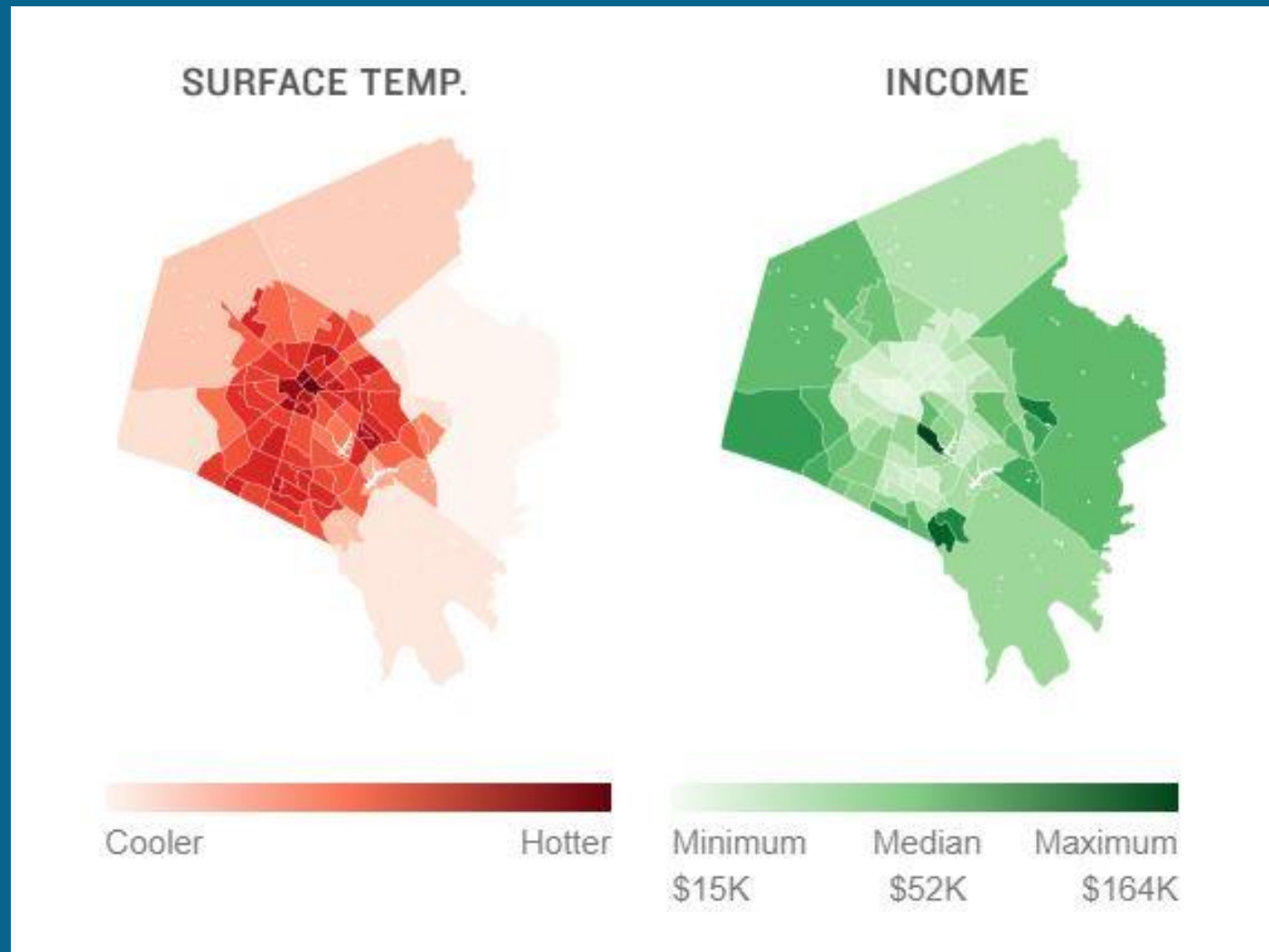
Source: IPCC Special Report

CHANGES IN SOUTHEASTERN UNITED STATES



Source: Fourth National Climate Assessment

TEMPERATURE IMPACTS ARE NOT EQUITABLY DISTRIBUTED



Fayette County distributions of median household income and satellite-measured surface temperatures

Source: NASA, U.S. Geological Survey, Census Bureau, NPR, University of Maryland

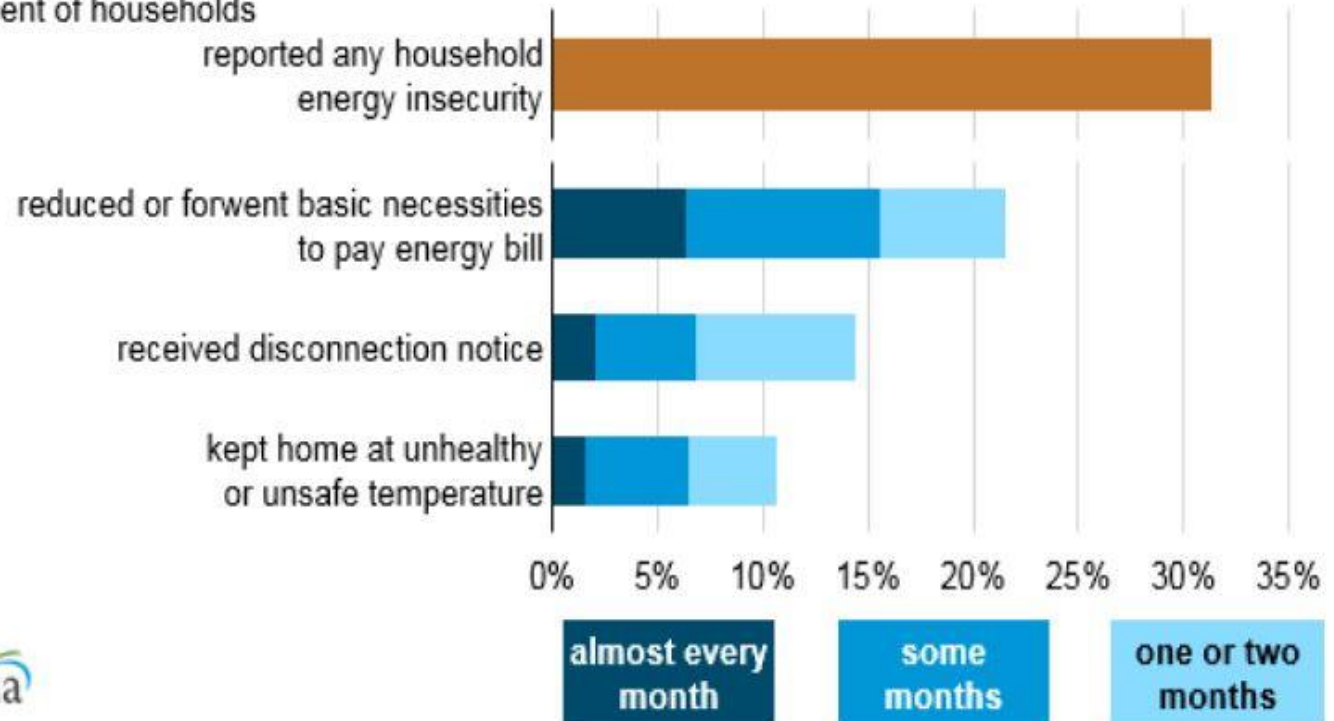
CHALLENGING ENERGY COSTS

Almost One-Third of U.S. households report impact of energy insecurity.

Source: U.S. Energy Information Administration, Residential Energy Consumption Survey (2015) and National Consumer Law Center (2021)

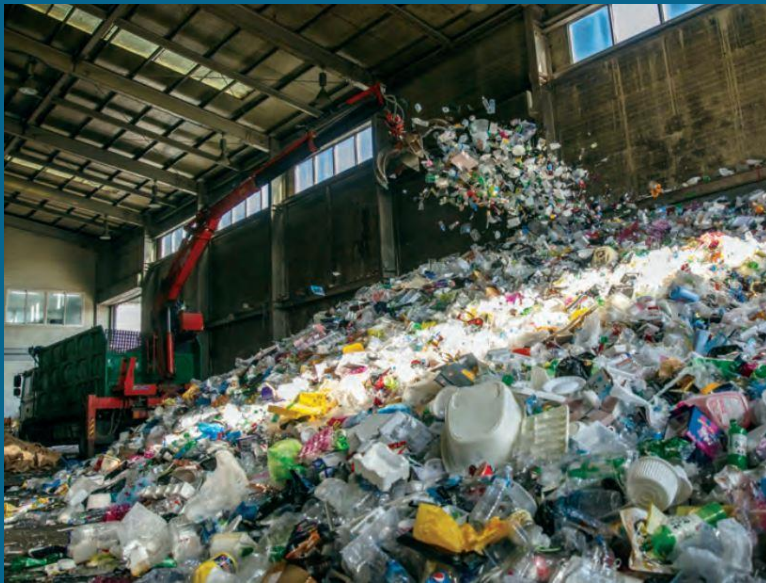
Energy Affordability Challenges Before COVID-19

Households that experienced energy insecure situations, 2015
percent of households



PLASTICS, ENERGY USE, AND GREENHOUSE GASES

SINGLE-USE PLASTICS INVOLVE ENERGY USE AND RESULT IN GREENHOUSE GAS EMISSIONS IN ALL PHASES OF THEIR LIFE CYCLE:



- Extraction and Transport
- Refining and Manufacture
- Decomposition
- Waste Disposal



PLASTICS ARE A LOCAL PROBLEM



- It is estimated that 15%-22% landfill waste are plastics
- Single-Use Plastics production is increasing
- Recycling rates are expected to remain steady
- Many plastics “escape” as pollution

PLASTICS
POLLUTION
CAUSES
ENVIRONMENTAL
AND HEALTH
PROBLEMS

PLASTIC FILMS, BAGS, AND DURABLE PLASTICS

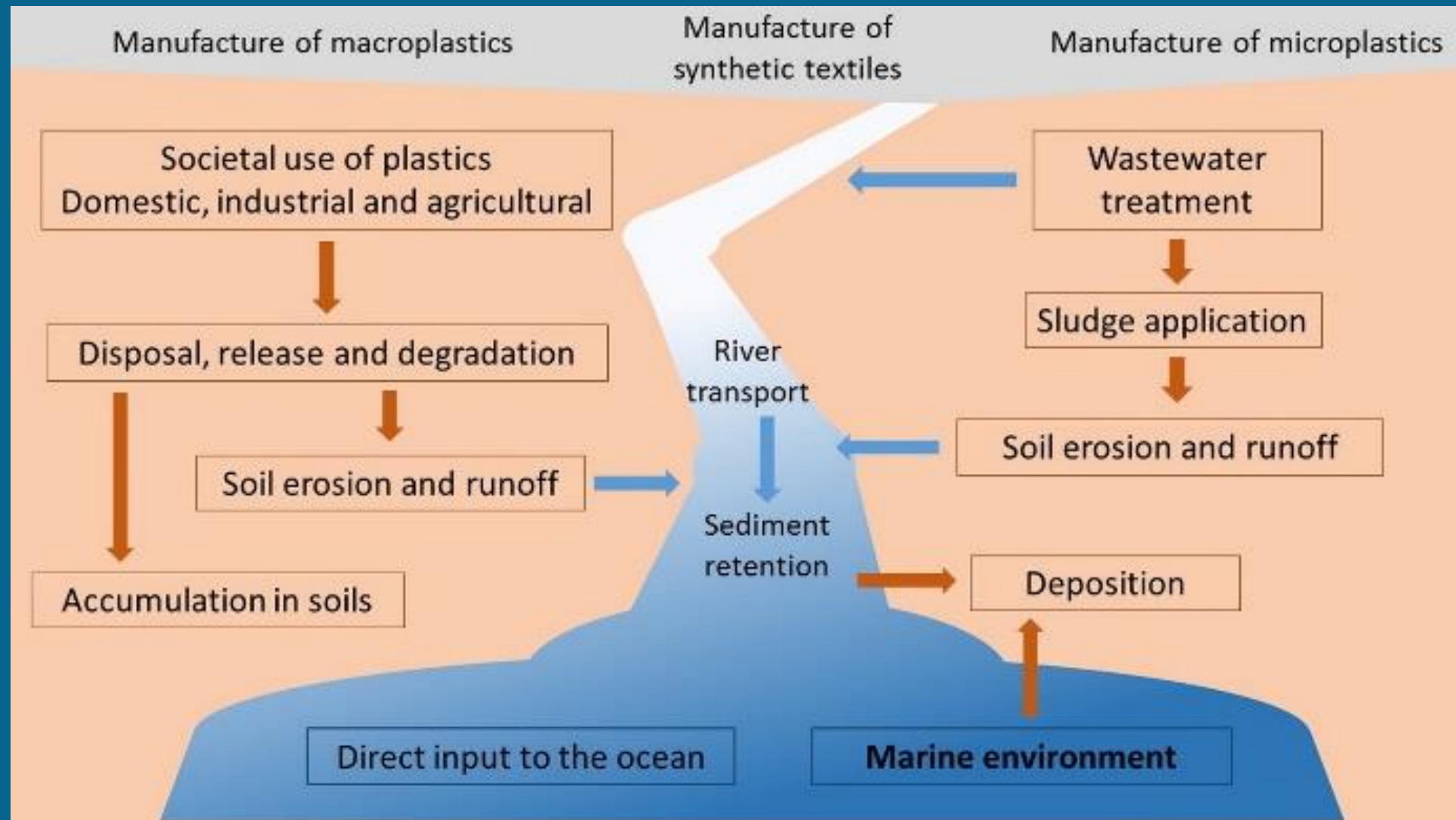
- Disposal problem
- Clog waterways and storm systems
- Form microplastics



MICROPLASTICS (SIZE < 5mm)

- Deposited in soil and water
- Potential health hazards

PATHS OF MICROPLASTIC POLLUTION



**Increased recycling alone
will not solve the environmental
impacts of Single-Use Plastics**

COMMON PLASTIC POLICY OPTIONS

Propose Single Use **Material Bans** to shift use away from plastic
(mixed results)

Propose Single Use **Material Fees** to discourage use but allow choice
(difficult to impose)

Expand **Public Education** impacts of plastics and the
Waste Management Hierarchy of Prevent, Reduce, Reuse, then Recycle
(effective and reliable)

Develop **Alternatives and Incentives**
(greatest opportunity and biggest investment)



OUR RECOMMENDATIONS

PROPOSED
ACTION
FOR THE
COUNCIL
AND LFUCG

UPDATE AND IMPLEMENT
THE *EMPOWER LEXINGTON PLAN*

- The LFUCG to appoint, hire, or designate a staff member to update the *Empower Lexington Plan* and assist Council and Environmental Commission in its implementation of the *Plan*

ACTION 1: Work with the designated staff member to implement the *Empower Lexington Plan*

- Climate Change
 - Identify neighborhoods and existing housing types with greatest potential for energy savings
 - Provide focused advice to lower-income areas
 - Communicate these needs and resources to landlords, neighborhood associations, residents, and others
- Plastics Pollution
 - Evaluate and communicate methods to reduce overall waste and, in particular, plastic waste and pollution
 - Continue to support existing City efforts to “Recycle Right”

ACTIONS BY
ENVIRONMENTAL
COMMISSION

ACTION 2: Provide advice to the LFUCG on key policy initiatives to promote energy conservation and reduce waste.

Potential policies include:

- Zero GHG emissions goal according to scientific consensus
- Opportunities for equitable environmental policies
- Property tax rebates or other incentives for energy use improvements
- Building code or other requirements to foster energy conservation
- Subsidies and mini-grants for adopting energy efficient methods
- Innovations in waste disposal and recycling to reduce energy use

ACTIONS BY ENVIRONMENTAL COMMISSION

ACTION 3: Increase educational efforts and stakeholder engagement

- Energy use, greenhouse gas emissions, and climate change
- Plastics pollution, importance of plastics pollution in Lexington and central Kentucky, and methods to reduce plastic waste

**ACTIONS BY
ENVIRONMENTAL
COMMISSION**



We request the Urban County Council:

- Appoint, hire, or designate a staff member to update and implement the *Empower Lexington Plan*
- Endorse the Environmental Commission's initiatives on Climate Change and Plastics Pollution