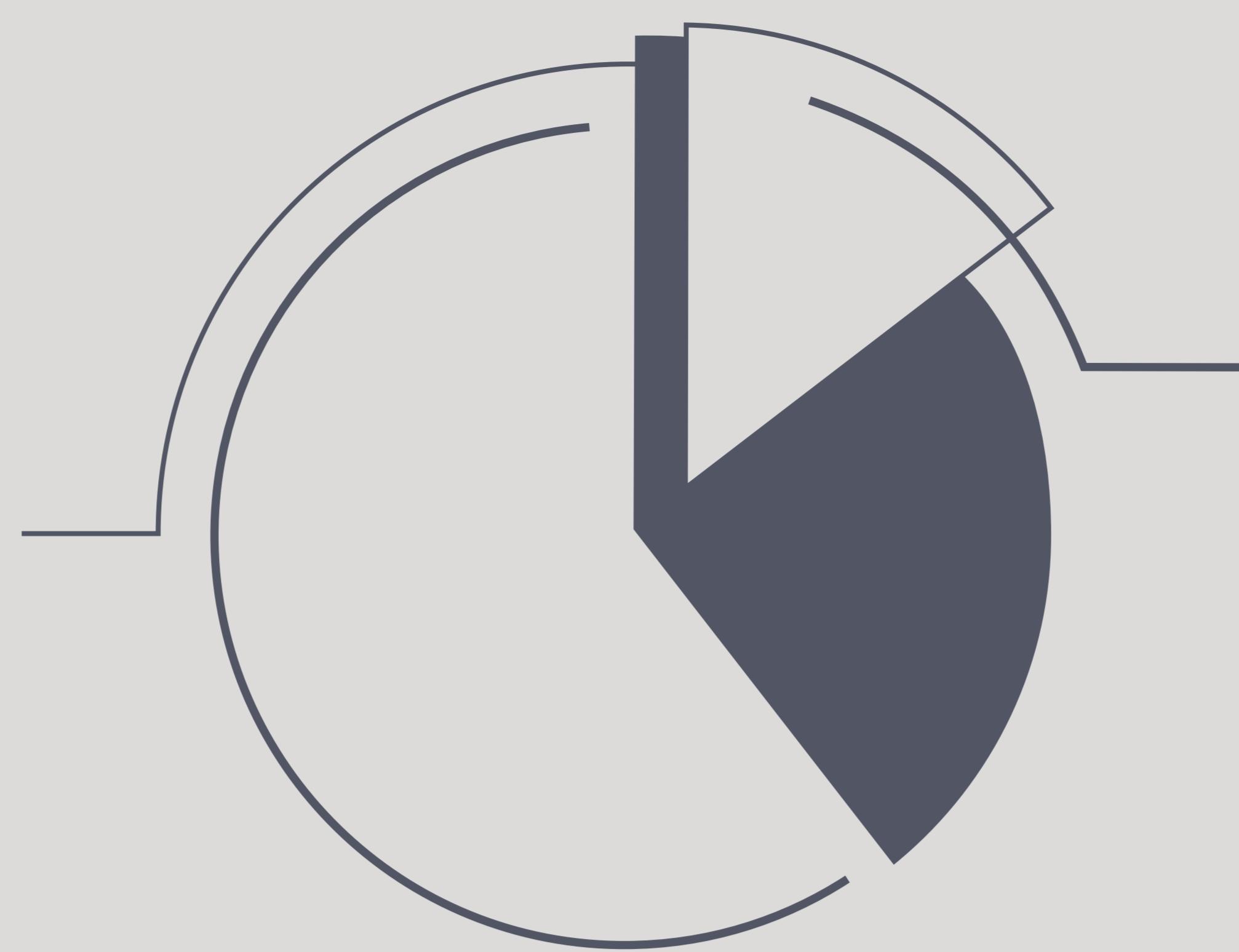


# Food Waste

## 36% from household

From production, storage, □ processing, distribution



**17%**  
from excessive purchase  
and poor planning

230 million tons of food waste can  
be reduced by better meal plan

# EmptyFridge: Better meal plans

*Become an ethical consumer in one click*

Application to reduce foodwaste from household by preemptively informing users of ingredients that will be unused and suggesting a set of menu that lower amount of waste from a grocery shopping list

## Online Grocery Store

Shop    Recipes    Cart

Select menus

1	2	3
4	5	6

Shop    Recipes    Cart

**My Cart**

Products	Price	Amount	Waste	Score
Meat (250g)	\$	180vg	15	
Vegetable (200g)	\$	0g	0	
Fish (250g)	\$	30g	4	
<b>Total</b>	<b>\$\$\$</b>			<b>19</b>

**Suggestions**

Change from **1** to **3**    Waste difference: Pork -100g, Salad +50g    **Select**

Reduce waste score by 10.5

Change from **1** to **3**    Waste difference: Fish -100g, Salad +20g    **Select**

Reduce waste score by 11.2

1

## PICK DISHES

User chooses a set of menus to make.

2

## LIST INGREDIENTS

Compute amount of ingredients used in selected dishes and create an order in the cart

3

## CALCULATE WASTE

Using product portion information in the online store, find amount of unused ingredients. Together with production cost and shelf life penalty, compute waste score for the chosen set of menus.

## WASTE SCORE

Amount  
×



Production Cost  
Penalty

Reflecting resources taken in production.  
For example, meat has higher production cost penalty than vegetable.

Shelf Life  
Penalty

Inversely proportional value of product shelf life,  
as a leftover with shorter shelf life is more likely to become waste.

4

## SUGGEST ALTERNATIVE

Evaluate waste score of each ingredient. Suggest some alternative dishes that would lower the total waste score.