

Here's what we do...



Provide safe drinking water



Provide new jobs



Work on a variety of environmental projects



Reduce disruptions to water supply



Encourage customers to use water wisely around the home



Ensure there's enough water for now and in the future



Return cleaned wastewater safely back to rivers, lakes and the sea



Reduce sewer flooding affecting homes or gardens and local areas

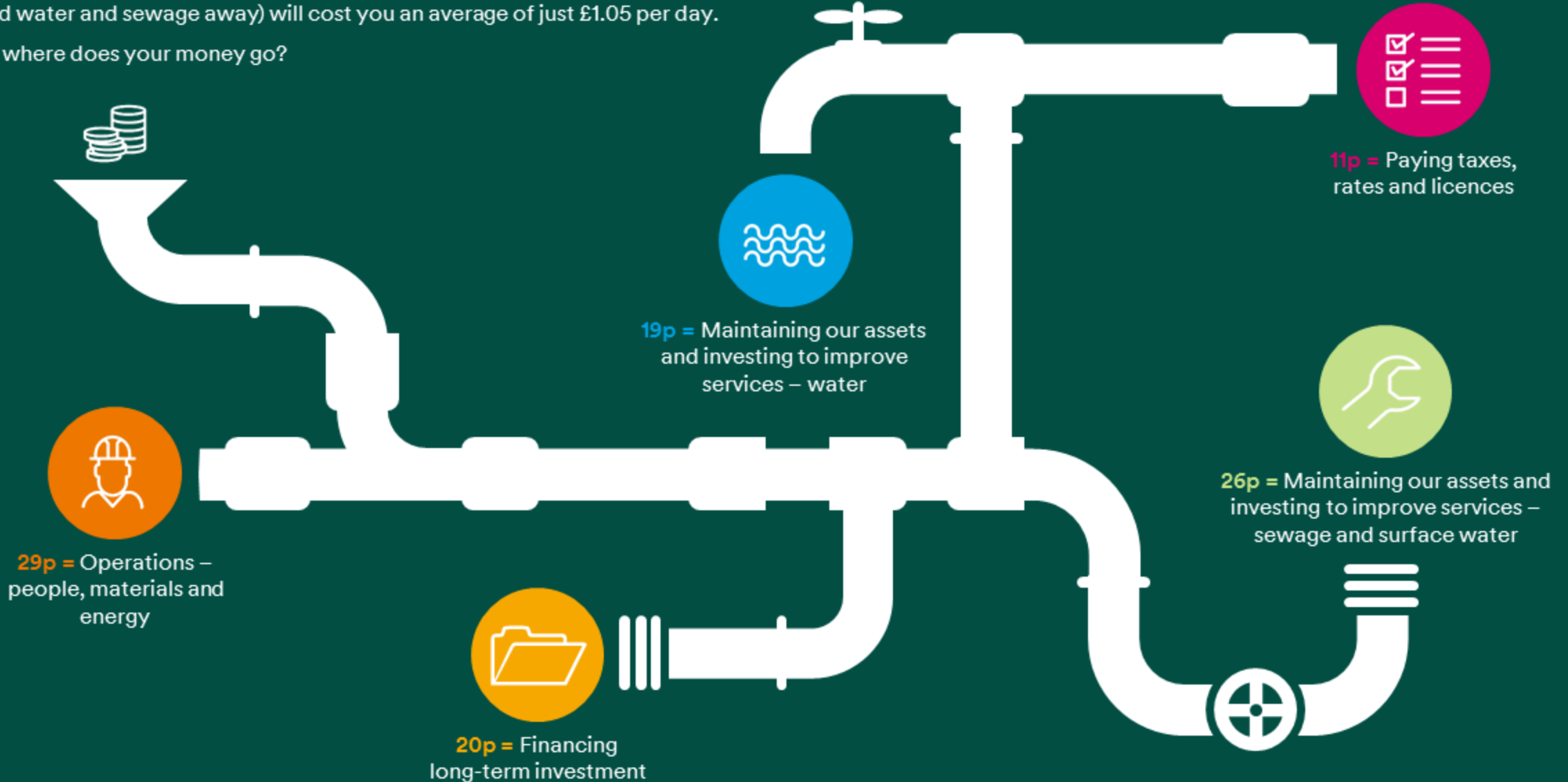


Ensure sufficient wastewater treatment and drainage for now and in the future

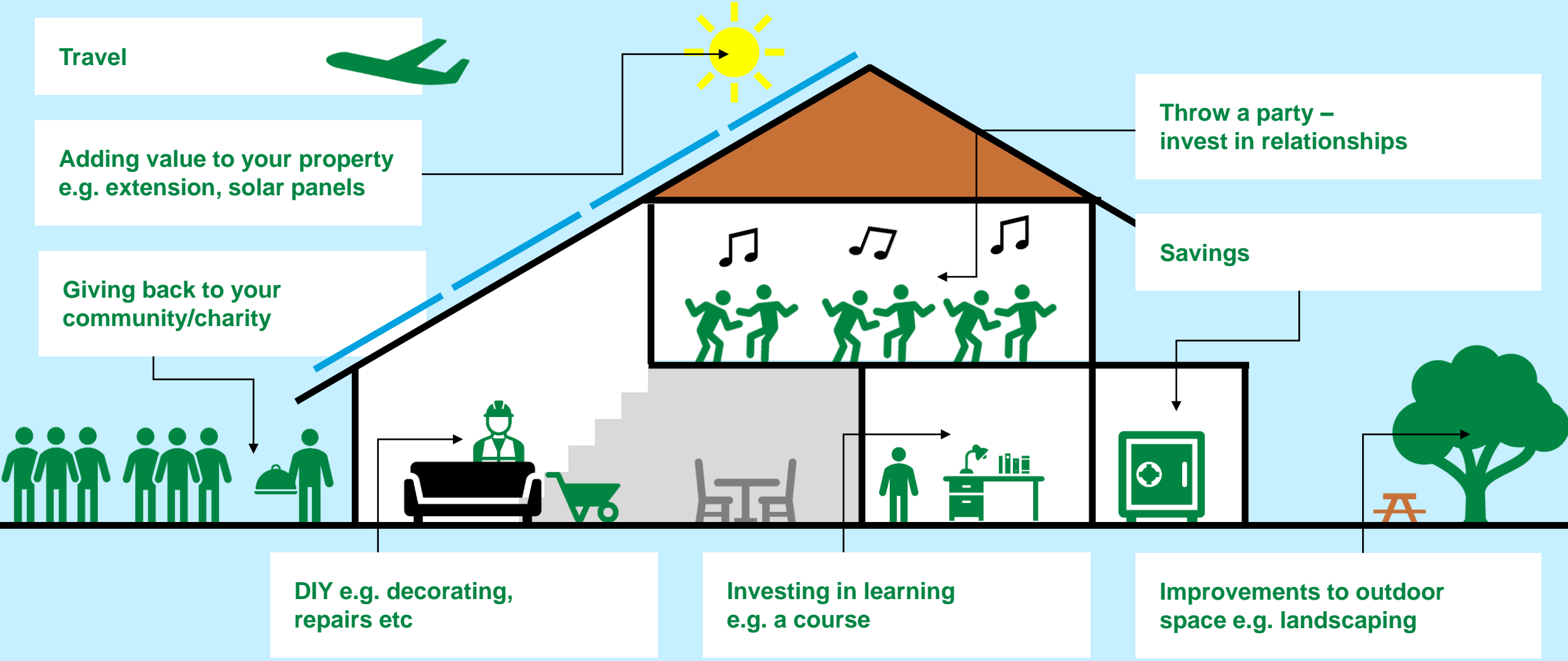
Where your £1.05 goes depending on the amount of water used

By 2025, to provide you with a supply of clean, fresh water (and to take all your used water and sewage away) will cost you an average of just £1.05 per day.

But where does your money go?



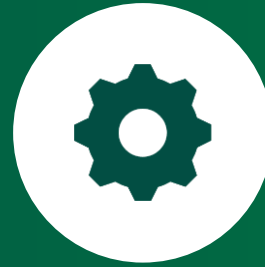
Imagine you have won £10,000 on the lottery... but there are certain conditions as to how you can spend your winnings!





Cost

Potential costs associated with installation & maintenance



Benefits to the manufacturing process and efficiency

Service reliability



Benefit to nature

Benefits to the local environment in terms of biodiversity, reduced carbon and recreation



Benefit to safety & wellbeing

The safety of United Utilities' workers as well as the safety of customers



Benefit to skills & knowledge

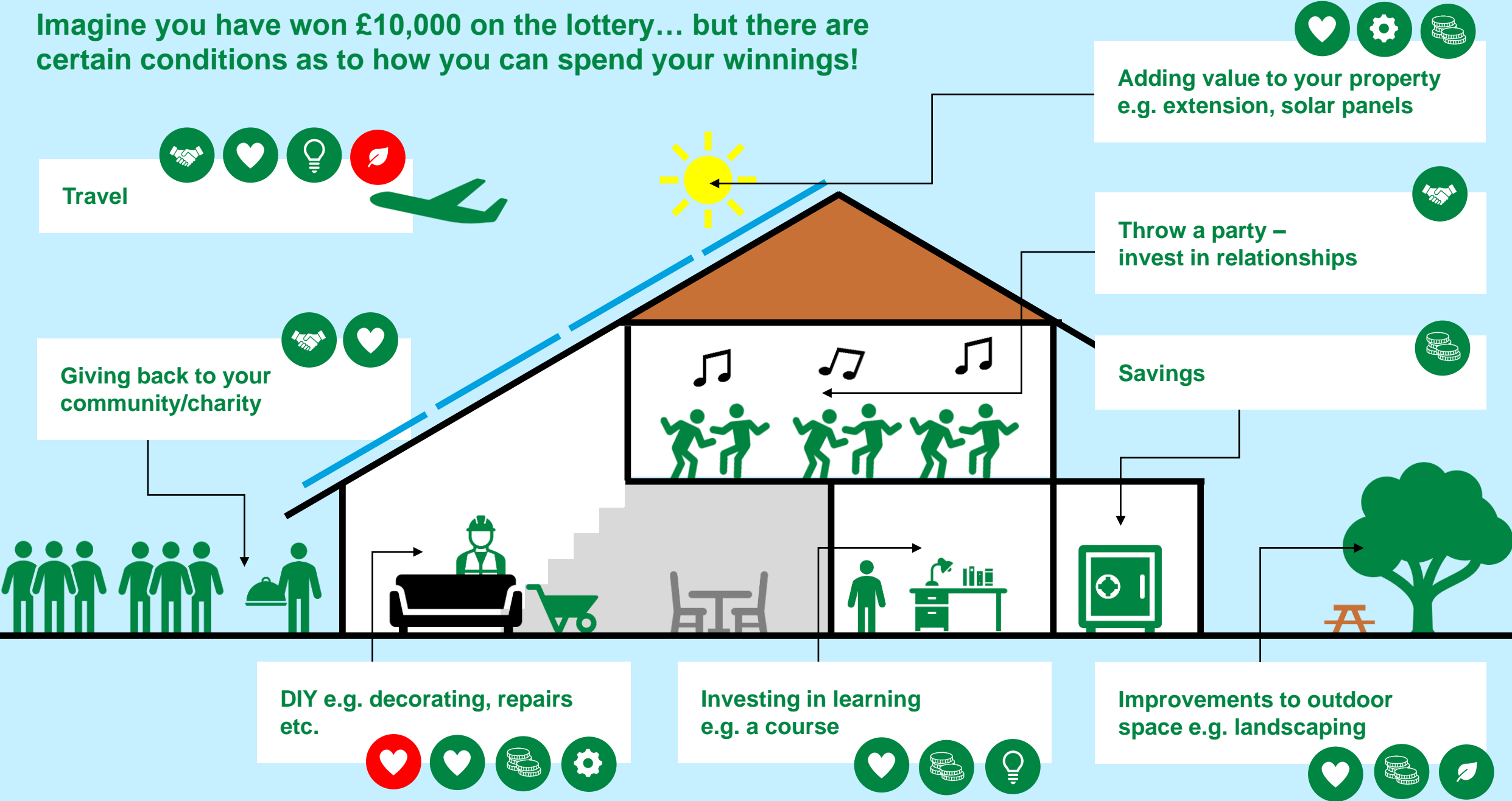
The skills, knowledge and technology that come together to provide a solution



Benefit to society

Potential benefits that the solution could bring to the local community e.g. quality of place

Imagine you have won £10,000 on the lottery... but there are certain conditions as to how you can spend your winnings!



Travel



Giving back to your community/charity



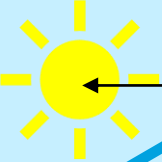
DIY e.g. decorating, repairs etc.



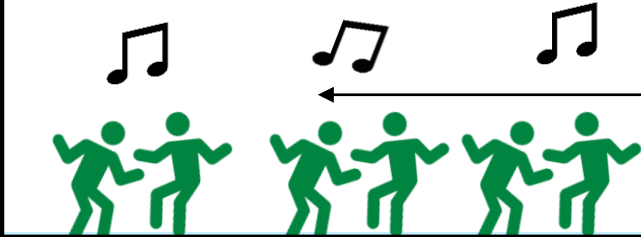
Investing in learning e.g. a course



Adding value to your property e.g. extension, solar panels



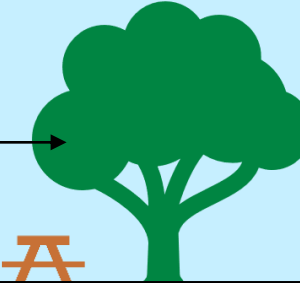
Throw a party – invest in relationships



Savings



Improvements to outdoor space e.g. landscaping



Option 1: Repair the sewer

This will stop the leak and will require less construction work but there is no guarantee how long the repair will last.



Cost

Potential costs associated with installation and maintenance.



LOW

The cost associated with this option is minimal. Workers will repair the leaking pipe. This would involve patching up the damaged part of the pipe.

Benefit to nature

The benefits that the option could bring to the local environment in terms of biodiversity, carbon and recreation.



MEDIUM

The works will have some negative impacts on the natural environment when they are taking place but this will be short lived.

Benefit to society

Potential benefits that the solution could bring to the local community i.e. quality of place.



HIGH

This option has high benefits to society. The pipe will be fixed relatively quickly which will stop the leak with minimal disruption to roads etc.

Benefit to safety & wellbeing

The safety of United Utilities workforce as well as the safety of customers.



MEDIUM

Workers will have to fix the pipework which creates a certain level of safety risk to staff and customers.

Benefit to skills & knowledge

The skills, knowledge and technology that come together to provide a solution



LOW

This is a fix on an existing pipe so there is no opportunity to upgrade pipes with the latest technology e.g. smart technology

Benefit to manufacturing processes & efficiency

The level of service reliability that the suggested solution provides.



LOW

It is a temporary fix but not a long term solution and will need to be repeated down the line.

Option 2: Replace the sewer

The second option is to replace the whole sewer. This would involve installing new pipework. This will stop the current leak but will incur additional costs and time as well as potentially causing disruption to customers.



Cost

Potential costs associated with installation and maintenance.



HIGH

The cost associated with replacing the sewer is high due to the materials required and the amount of work.

Benefit to nature

The benefits that the option could bring to the local environment in terms of biodiversity, carbon and recreation.



LOW

The construction work will impact the local environment. There will be noise and carbon disruption as well as digging disrupting foliage and wildlife.

Benefit to society

Potential benefits that the solution could bring to the local community i.e. quality of place.



MEDIUM

This solution will impact the local community in terms of noise, roadworks and disruptions to service but will make the service more reliable in the future.

Benefit to safety & wellbeing

The safety of United Utilities workforce as well as the safety of customers.



LOW

This work will take longer and is larger scale than Option 1, thus increasing the safety risk for workers and customers. The disruption may impact on customers' wellbeing too.

Benefit to skills & knowledge

The skills, knowledge and technology that come together to provide a solution



HIGH

Replacing the sewer means that United Utilities can use the latest smart technology which will inform United Utilities of any blockages remotely.

Benefit to manufacturing processes & efficiency







The level of service reliability that the suggested solution provides.



HIGH

Replacing rather than repairing the sewer increases its reliability and efficiency and means that there is a lower likelihood of problems in the short term

Sewer Board Report

Cost	
Benefit to Nature	
Benefit to Society	
Benefit to safety & wellbeing	
Benefit to skills & knowledge	
Benefit to manufacturing processes & efficiency	

Repairing the sewer



Replacing the sewer



Sustainable drainage solutions

Sometimes, due to storms or intense rainfall, United Utilities' wastewater treatment works receive more rainwater and wastewater than they're able to process or store.

When this happens the network can back up which can cause flooding via manholes, drains and toilets. To prevent this, the mix of rainwater and wastewater passes into rivers and the sea – this is called a spill. Sewer spills are legally permitted (by the Environment Agency) to discharge when sewers are full because of heavy rainfall. This protects properties and streets from flooding but can have a negative impact on river water quality including areas such as biodiversity and recreation.

Legal requirements mean there is the need to reduce the number of spills to 10 spills or less per year to reduce harm to local waterways. There are different ways United Utilities can address this target.



Option 1: Storage Tanks

There is an option to build a concrete tank, usually underground, to increase storage capacity of rainwater and wastewater. This will then be treated following environmental regulations before being returned to the local waterway.

This will be covered up following installation

Cost

Potential costs associated with installation and maintenance.



MEDIUM

There is a medium level of cost associated with building a storage tank e.g., the building materials, workforce etc.

Benefit to nature

The benefits that the option could bring to the local environment in terms of biodiversity, carbon and recreation.



LOW

Installing storage tank means digging an area of land to install it This will cause disturbance to local wildlife and habitats. The carbon levels will be quite high as it's concrete.

Benefit to society

Potential benefits that the solution could bring to the local community i.e., quality of place.



MEDIUM

Storage tanks provide some benefits to society i.e., provide a place for rainwater to collect to avoid local flooding. But there will also be some disruption to customers from digging up the area.

Benefit to safety & wellbeing

The safety of United Utilities workforce as well as the safety of customers.



MEDIUM

During the work to install the storage tank, there may be safety risks to workers and customers and this may impact wellbeing. This solution will require ongoing maintenance.

Benefit to skills & knowledge

The skills, knowledge and technology that come together to provide a solution



LOW

This is the traditional way water companies have dealt with this type of problem, so United Utilities doesn't develop new skills or knowledge.

Benefit to manufacturing processes & efficiency

The level of service reliability that the suggested solution provides.



MEDIUM

This type of solution is very reliable, but is not very flexible. For example, future rainfall may be greater or less than initially predicted leading to the storage tank being too big or too small.

Option 2: Sustainable Drainage Solutions

Sustainable drainage solutions allow areas to store water in natural grooves in the land and can be used to allow water to soak away. They slow the speed at which water travels and the vegetation traps and removes pollutants, meaning less water arrives at the wastewater treatment works during heavy rainfall.



Cost

Potential costs associated with installation and maintenance.



MEDIUM

There is a medium level of cost associated with building SuDS e.g., the building materials, workforce etc.

Benefit to nature

The benefits that the option could bring to the local environment in terms of biodiversity, carbon and recreation.



HIGH

This solution has a high level of benefits to the natural environment i.e. vegetation and the creation of green spaces

Benefit to society

Potential benefits that the solution could bring to the local community i.e., quality of place.



HIGH

This solution has high benefits to society i.e., reducing localised flooding and visually appealing by adding natural beauty to the area.

Benefit to safety & wellbeing

The safety of United Utilities workforce as well as the safety of customers.



MEDIUM

This solution will need building in the first instance but will bring wellbeing benefits.

Benefit to skills & knowledge

The skills, knowledge and technology that come together to provide a solution.



HIGH

SuDS are less familiar to the water sector, by building them, United Utilities will learn how to make them more effective and cheaper, therefore improve their skills and knowledge of this type of solution.

Benefit to manufacturing processes & efficiency







The level of service reliability that the suggested solution provides.



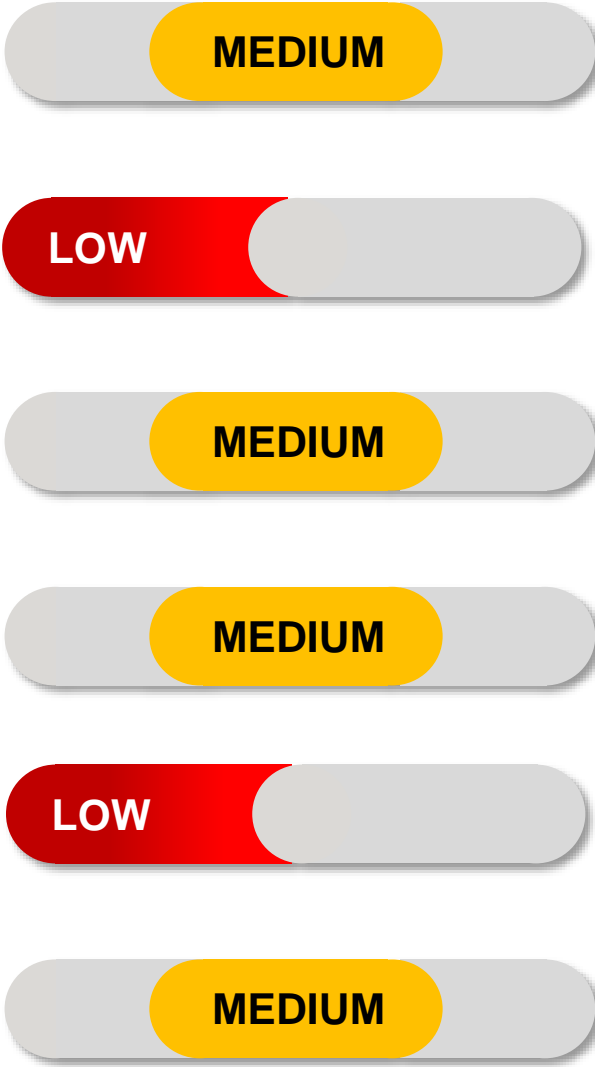
MEDIUM

This solution is reliable and doesn't require much maintenance. It is likely to be adaptable to future demand.

Sustainable Drainage Solutions Board Report

Cost	
Benefit to Nature	
Benefit to Society	
Benefit to safety & wellbeing	
Benefit to skills & knowledge	
Benefit to manufacturing processes & efficiency	

Storage Tanks



SuDS

