100% Recyclable

Fact or Fiction

Points to cover

The manufacturer says it 100% recyclable is it ?

The preventing factors

The recycling journey

The other options – waste to energy?

Carbon foot print and reporting Scope3

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What does 100% recyclable actually mean

- It actually means that in its virgin state the material can be recycled somewhere in the world !
- This does not actually mean it is easily recyclable or practical
- The product may well be able to be returned to the manufacture for reprocessing but this could be in the far east for example
- Even some of the everyday materials such as cardboard may well travel 100 if not 1000 of miles to be recycled back to a board based product dependent on there quality and acceptability in to the mills

What stops it from being recycled

Additions such as clips, ties, ringlets and even printing can change the base product from being easily recyclable to practically non recyclable

A prime example is water repellent card, great for outdoor use as POS, but non recyclable in the UK and only one mill in France can take it, but only in very small amounts, the simple addition of the chemical repellent, simply stops the ability for a traditional cold-water mill to break the fiber back to strand material, ready for recycling .

The hot water mill in France can only take small volumes as the chemical whilst semi dissolved, is still effective and can affect the board product

Many recycling companies are not able to accept base materials with more than a 3-5% contamination. So a piece of POS with Velcro to hold in place instore, would take the product from recyclable to non recyclable as two different materials that can not simply be separated

Even the humble pop bottle can prove problematic, the Bottler PET- the cap HDPE and the label (is not printed on the bottle) could be LDPE, this makes recycling it hugely difficult as all three have different melt temperatures and are not able to be easily separated, significantly reducing both the value and the availably of recyclers able to deal with this material

Understanding the recycling journey

- From the initial collection from the store/manufacturer the material can travel 1000 miles before it is actually recycled for example
- Collected from site
- Taken to a transfer station or recycling centre
- Sorted and graded
- At this point the material can be reprocessed but not always here in the UK
- For example our recycler of certain plastics has a reprocessing granulation plant in Wiltshire so already the material could have travelled 100s miles to get to their plant from around the UK
- Once they have granulated the specific plastic type material specific (PP,HDPE ETC) they will then sell the “product” on the world market, so this could be into Europe but more likely the far east as this is the major market for these materials
- Normally this is shipped in 1 tonne bags with 24 bags per shipping containers via the high seas or road/rail dependent on end market destination
- This will then ultimately end up at a site that will re-use the plastics back into a product

Other environmentally factors to consider

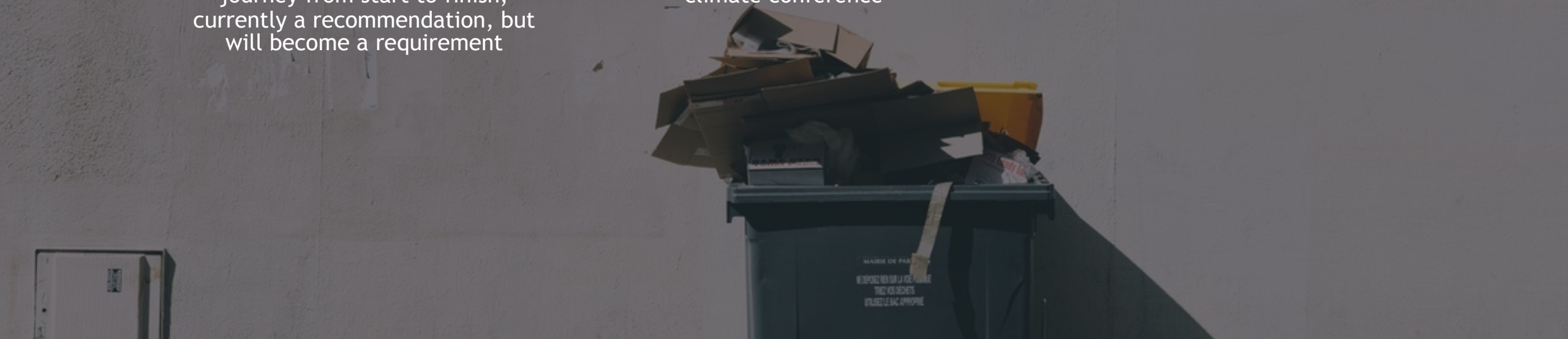
- Product choice – this normally sits with the design team and can have significant bearing on how, where and what parts can be recycled
- Can it be made from one material rather than several
- Could the material be re-used or re engineered by the supplier locally
- Can the product/material be used several times
- Is it suitable for use in waste to energy as an alternative fuel
- When considering a product what will be its real life cycle journey and is it easily recyclable in practical terms

Other driving factor

ISO 14001 – life cycle of products and materials, this will require companies to track there products/materials whole life journey from start to finish, currently a recommendation, but will become a requirement

Carbon reporting – this we see as the main environmental driver going forward, especially following on from last years climate conference

Customers commitments to carbon reduction or neutrality



Waste to Energy

Over the last 10 years more and more waste has been taken in to waste to energy plants, the waste is simply burned to produce electricity and the UK now has a significant number of these sites

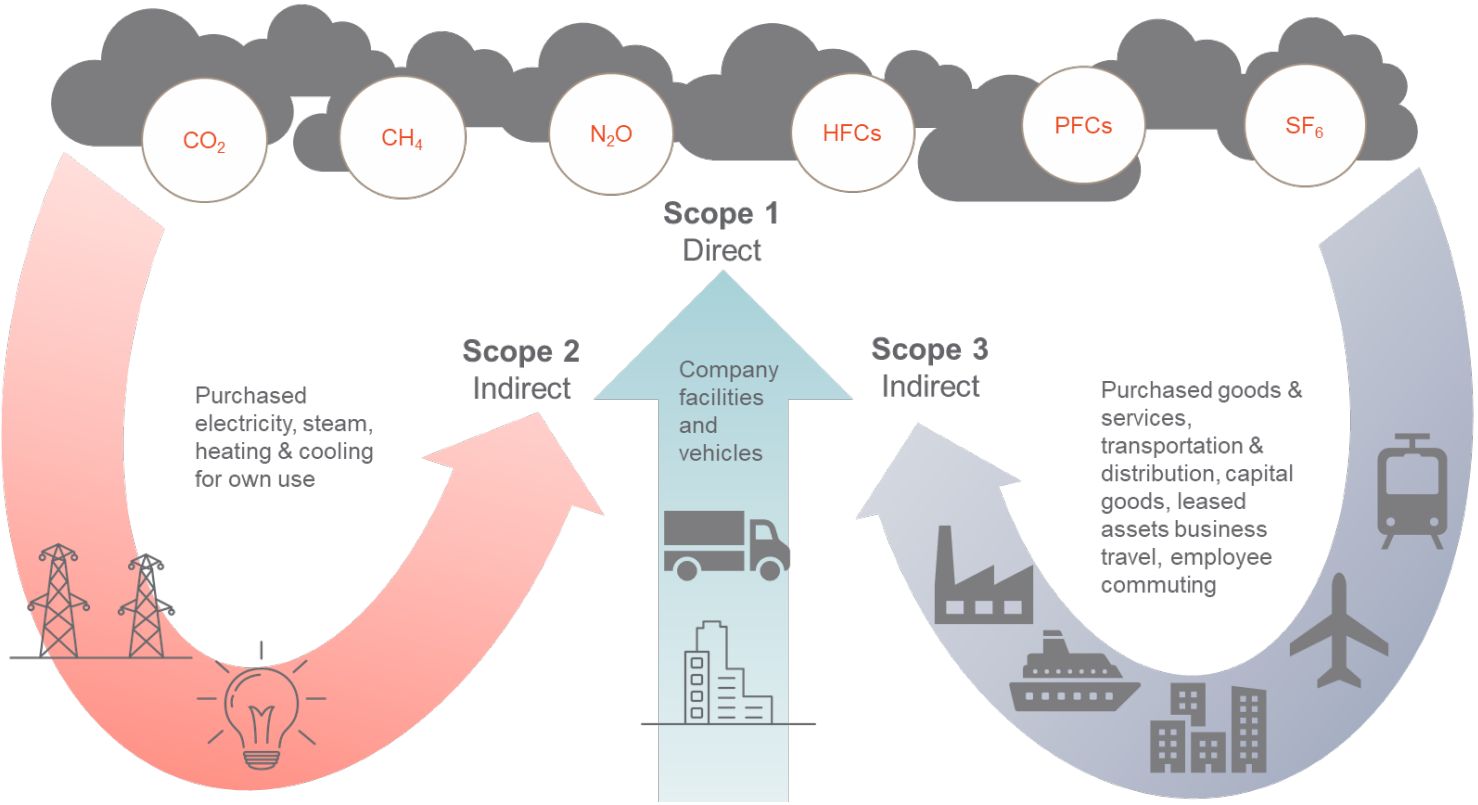
However the UK has been late to this market and the vast majority of commercially collected waste is taken to either to a Materials Recovery site (MRF) or to a location that simply bales the waste ready for incineration.

Over 80% of the waste that arrives and is sort at MRF is recycled or reused the reaming “residue waste” is then in the main baled and sent to waste to energy

The Waste to Energy Journey

- The majority of the UK commercial waste to be used in energy is sent to Europe or Scandinavia!
- This is predominately driven by commercial market forces, simply it is more cost effect for the producer to send the material across Europe mainly by road and sea, than to deal with it at the UK facilities.
- There are some notable local exception for example Tom White Waste in Coventry has a direct supply agreement with the Cemex works in Rugby, they supply the material for Cemex to burn to produce both heat and energy in their cement kilns, unfortunately this is and exception.
- The world energy crisis and rising fuel costs could see this change, the risk then is we don't have enough facilities yet to handle the volumes that are generated within the UK
- Whilst waste to energy has always been seen as the last resort before landfill, we will need to start to look at the Carbon Impact of recycling, against other disposal methods such as energy

Scope 3 and Carbon reduction



Carbon Reporting

We are already being asked to look at producing a report, on the carbon used to deal with the waste and recycling of products, from collection through to final destination.

This is something very new, but we expect to become the norm over the next 3-5 years

To meet clients expectations and to demonstrate carbon reduction year on year reporting will be key

Supplier selection based on their credentials around achieving carbon reduction and meeting carbon neutrality, with time scales and key achievement dates

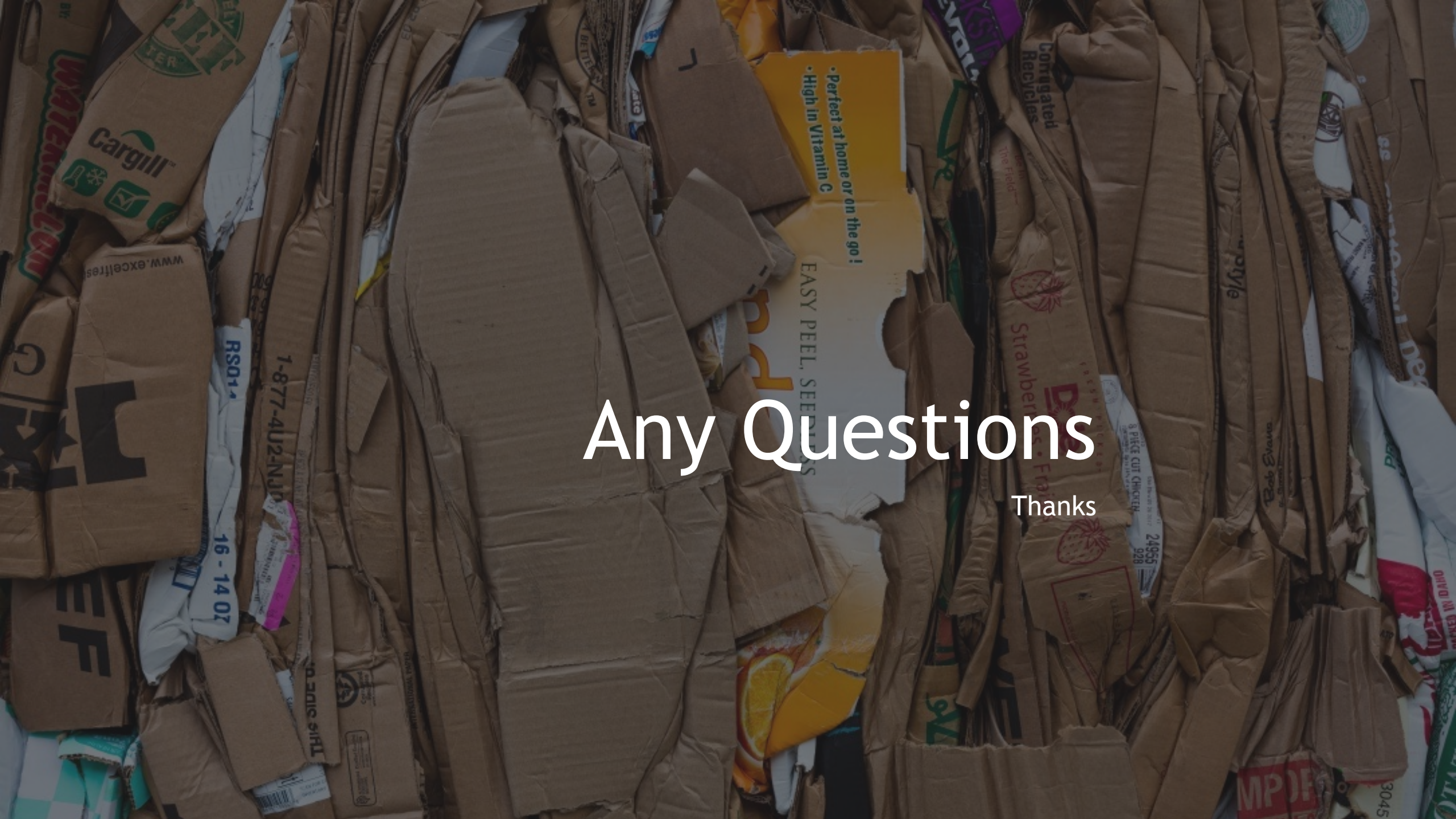
This we see as running alongside the current waste hierarchy and will become a key part of the whole waste and recycling selection process

Carbon footprint reporting

A report detailing the whole life cycle of a material or product from manufacture to reuse, or recycled back to the base material(s) or ultimate disposal

Product or material selections based on this level of reporting and or the suppliers commitment to Carbon reduction and neutrality timelines

We are also already seeing ISO accessors “suggesting” this as an opportunity for improvement


Any Questions
Thanks