



## Waste Management Based on Maqashid Shari'ah And Circular Economy: Evidence in Blitar Regency

Aryanti Nur Azizah\*, Ahmad Djalaluddin, Siswanto  
UIN Maulana Malik Ibrahim, Indonesia  
\*Corresponding Author: aryantiazizah997@gmail.com

### **Abstract:**

*This research finds and analyzes waste management based on maqashid shari'ah and circular economy in TPST 3R Blitar Regency, namely TPST 3R "Abdi Karya Mandiri" and TPST 3R "Punokawan". This research uses a qualitative approach with this type of case study research because this study examines an event that occurs today related to waste management based on maqashid shari'ah and circular economy. Data excavation methods use observation, interview, and documentation methods. This study found that maqashid shari'ah-based waste management in TPST 3R Blitar Regency indirectly meets the five main elements of shari'ah maqashid, namely *hifzh al-din*, *hifzh al-nafs*, *hifz al 'aql*, *hifzh al-nasl*, and *hifzh al-mal*. Then circular economy-based waste management at TPST 3R Blitar Regency produces sustainable and renewable products that indirectly follow the circular economy concept because the waste management and processing system in the two TPST 3R has a rotating and interconnected production flow from upstream to downstream.*

**Keywords:** Waste Management, Maqashid Syari'ah, Circular Economy

**JEL Classification Code:** A13, Q20, Q53, Q56

### **1. Introduction**

Indonesia is known to be the second-largest contributor of plastic waste to the sea globally. Based on data from The World Bank in 2018, it is estimated that as much as 1.27 million tons of plastic waste were donated by 87 cities on the Indonesian coast to the ocean. With the composition of plastic waste reaching 9 million tons, it is estimated that there are about 3.2 million tons of plastic straws. Therefore, Indonesia is the second-largest waste contributor to the world's oceans after China.

From the exposure of waste data spread in Indonesia above, it can be known that waste management in Indonesia has not been maximized, so there needs to be changes or improvements in its processing and management. In this case, it is necessary to realize the government and the community to reduce the spread of waste on land and in the waters, as listed in Law No. 18 of 2008 concerning Waste Management. The Law also explained that it is necessary to solve the problem with comprehensive and integrated management from upstream to downstream. The concept of 3M (reducing, reusing, recycling waste) is a current solution to manage waste to be helpful and healthy for the community and the environment.



Integrated Waste Treatment Plant that uses the concept of 3R (Reduce, reuse, recycle) or so-called 3M (reduce, reuse, recycle waste) is also a place to manage waste by the 3M concept. Article 1 Number 5 of Law No. 18 of 2008 concerning Waste Management that integrated waste treatment sites are places for implementing activities in the collection, sorting, reuse, recycling, processing, and final processing of waste (Waste Management, 2008).

Waste that is considered harmful can be a positive thing by recycling waste into economically valuable waste. Good management or management supports the running of waste management so that waste can be helpful in the processing site and the community.

In this regard, Islamic values can be included in the management system, considering that in the teachings of Islam, each of its activities must have a positive purpose and provide benefits for the people so that no one is harmed. It is related to the shari'ah maqashid, which must include five aspects: the protection of religion, soul, reason, ancestry, and property.

One of the concepts of waste management is the circular economy. This concept has been planned by the Indonesian government to be implemented in total in 2024 to create a circular economy ecosystem where waste resources are managed sustainably. The concept was introduced by Pearce and Turner in 1989, although it dates back to the 1960s and has been contributed by many researchers, theorists, and vocational parties (Sariatli, 2017).

One of the districts that have an Integrated Waste Treatment Plant (TPST) 3R (Reduce, Reuse, Recycle) or called 3M (reduce, reuse, recycle waste) is Blitar Regency. TPST 3R located in Blitar Regency is located in two locations: TPST 3R "Abdi Karya Mandiri" and TPST 3R "Punokawan". Blitar Regency is a regency that aims to make its territory free of plastic waste with the BALISTIC program (Blitar Libas Plastic Waste). Waste management in TPST 3R "Abdi Karya Mandiri" has the goal of environmental cleanliness and making waste a friend because as a human living on god's earth, it must be responsible for maintaining it. In addition, TPST 3R aims to save the earth by spreading the science of plastic waste management into fuel oil products. TPST 3R "Abdi Karya Mandiri" by the concept used, namely 3R or 3M, seeks to realize the concept by reducing people's waste so that it is not entirely wasted in landfills, which then reuses waste that can still be used and recycles waste that cannot be used.

Although it only covers one village by managing the waste of 175 family heads and several cloth shops, TPST 3R "Abdi Karya Mandiri" in 2019 was able to make a profit of Rp. 38. 459,800. The profit is generated from organic waste and inorganic waste. Organic waste is used as compost, and inorganic waste is used as fuel in the form of premium, kerosene, and diesel. Processed plastic products in the form of fuel are used for TPST 3R, farmers, and communities in need.

Then the second location is TPST 3R "Punokawan" located in Jatinom Village, Kanigoro Subdistrict. TPST 3R "Punokawan" is still very new because it



began operations in 2019. A processing site is a production unit of a business entity owned by Jatinom Village, which is functioned for the benefit of the community regarding waste. TPST 3R "Punokawan" has the goal of waste ending up in TPST, lest it ends up in the landfill. TPST 3R "Abdi Karya Mandiri" by the concept used, namely 3R or 3M, seeks to realize the concept by reducing people's waste so as not to be wasted into landfills, which then reuses waste that can still be used and recycles waste that cannot be used and processes all waste wasted in TPST 3R "Punokawan" so as not to help increase the volume of waste in Blitar Regency landfill.

Although still running for one year, TPST 3R "Punokawan" made an innovation by turning baby diapers into flower pots. The innovation arises because of the large number of baby diapers in garbage treatment plants which are difficult to reprocess. In addition, TPST 3R "Punokawan" makes waste ash into flower pots and compost mixtures. Then it is sold back to the community. From the above exposure, researchers are interested in researching how to manage a circular economy and waste based on maqashid shari'ah in TPST 3R Blitar Regency.

## 2. Literature Review

Maqashid is done with full consideration and is aimed at achieving something that can lead someone to the straight path (truth), and the truth that is obtained must be believed and practiced firmly. Furthermore, by doing something, it is hoped that it can solve the problems it faces under any conditions (Busyro, 2019). The use of the word al-shari'ah the meaning a place to grow, and a water source means that water is the source of human, animal, and plant life. Likewise, Islam is the source of life for every Muslim, his benefit, progress, and safety, both in this world and hereafter (Mutawali, 2017). Without sharia, man will not get good, just as he does not get water to drink. Therefore, Islamic law is the source of every goodness, hope, and happiness, both in life in this world and in the hereafter. Thus, maqashid al-shari'ah, in terms of meaning, is a human effort to get the perfect solution and the right way based on the primary sources of Islamic teachings, the Qur'an and the hadith of the Prophet Muhammad SAW (Busyro, 2019), maqashid shari'ah are meanings and goals that can be understood/recorded in every law and to glorify the law itself, or it can also be defined with the ultimate goal of Islamic shari'a and the secrets laid down by al-syari' in the law he established.

Al-Syatibi believed that in the context of establishing the law, all legal provisions pivot to five main things called al-dharuriyat al-Khaimah (Syarifuddin, 2009). First, Humans as creatures of Allah must believe in Allah who created, maintains, and regulates their lives. Religion or religiosity is vital for human life; therefore, it must be maintained in two ways to make it happen and continually improve the quality of its existence. All actions that lead to the



realization of perfection of religion in a person are called beneficial actions. Second, life or soul is the essence of everything because everything in this world rests on the soul. Therefore, the soul must be preserved for existence and improved in quality. Third, the mind is an essential element of human life because the mind is what distinguishes human nature from other God's creatures. Therefore, Allah commanded humans to always take care of it. All forms of action that lead to the form and perfection of the mind are good deeds or benefits. One form of improving the quality of mind is education. Fourth, what is meant by generation here are descendants in the family institution. Descendants are gharizah or instincts for all living things, with which the continuation of human life takes place. What is meant by the continuation of the human type here is the continuation of the human type in the family. In contrast, what is meant by the family here is a family produced through a legal marriage. Maintaining generation is part of the primary human needs. These descendants will continue the human generation on earth. Regulations regarding descent are necessary so that later generations can continue the function of the caliphate. Maintenance of generation also socializes noble behaviors that humans must carry out. Fifth, wealth is something that humans need because, without wealth (eating), humans cannot survive.

According to the Ellen MacArthur Foundation, the design of today's economy stems from the historically unequal distribution of wealth. Because resource consumers are mainly from the most developed regions (western society) while resource owners are from global areas, in this case, the materials are cheaper than the cost of human labor, so many manufacturers use these materials (Ghosh, 2020). The consequences of cheap materials or high human labor costs result in neglect of recycling, reuse, and emphasis on waste. Meanwhile, accounting regulations and fiscal rules also support this economic model because there are no rules to burden producers with externalities. Therefore, producers are less motivated to consider external costs for their production. In general, this linear economy is called take-make-dispose, that is, take the needed resources, make goods to sell, make a profit, and throw away everything that is not needed (Ghosh, 2020).

Meanwhile, the circular economy is a feasible, sustainable concept and can overcome current challenges. The circular economy concept allows reducing waste and replaying components of goods by design through a closed-loop and cascade approach that contains economic dependence on material and energy inputs, increases the resilience of the economic system and environmental preservation, supplies people's ever-increasing demand, and improves operability and cost efficiency production (Sariatli, 2017). It can be understood that the linear economy has a take-make-dispose concept. It takes resources, then processes them, and ends up in landfills without any recycling or reuse. Meanwhile, the circular economy has a rotating concept. It does not just stop at landfills but strives for every product made by the industry to be more durable

and can be reprocessed when it is no longer suitable for use. So that only waste is left that really cannot be reused.

The following are the main processes in the circular economy concept (Rizos et al., 2017):

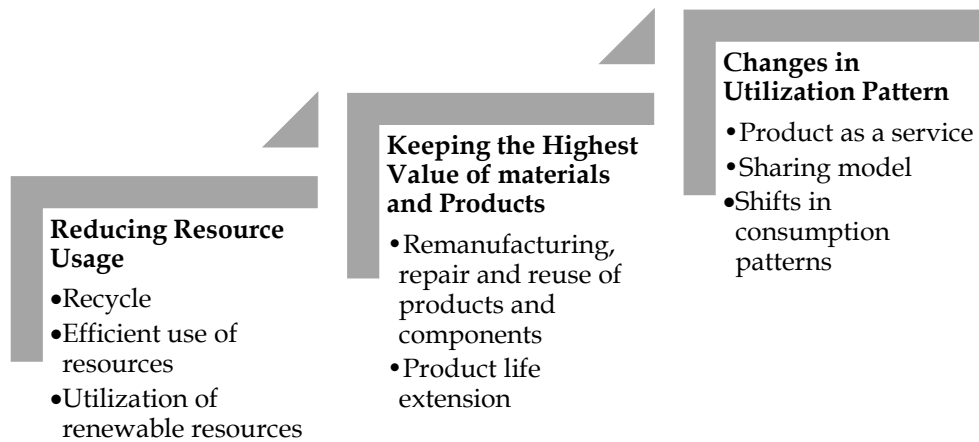


Figure 1: Chart of Main Processes in Circular Economy

### 3. Research Methods

This research falls into the category of qualitative research because this research in practice examines phenomena in the field as objects of study. Moreover, this research is included in the type of case study research because this study examines an event or case that occurs today related to waste processing based on maqashid shari'ah and circular economy. This research was conducted at the 3R Integrated Waste Treatment Plant "Abdi Karya Mandiri" in Wlingi Subdistrict of Wlingi District of Blitar Regency and integrated waste treatment plant 3R "Punokawan" in Jatinom Village, Kanigoro District, Blitar Regency. This study uses the data analysis model from Creswell. There are several data analysis steps, starting from processing and preparing the data for analysis, reading the entire data, analyzing in more detail by coding the data, applying the coding process, describing the theme to be presented, and interpreting the data.

### 4. Finding and Discussion

#### Analysis of waste management based on maqashid shari'ah in TPST 3R Blitar Regency

Maqashid shari'ah are meanings and purposes that can be Maqashid shari'ah is meaning and purposes that can be understood/recorded in each law and glorify the law itself. It can also be defined with the ultimate purpose of Islamic sharia and the secrets established by al shari'ah in each law established by Him (Busyro, 2019). Al-Syatibi argues that in order to establish the law, all legal provisions pivot to five main things called al-dharuriyat al-khamsah (five



main things that must be maintained), namely the protection of religion (hifzh al-din), protection of the soul (hifzh al-nafs), protection of reason (hifzh al'aql), protection of offspring (hifz al-nasl), and protection of property (hifzh al-mal) (Nurhayati & Sinaga, 2018).

### **Protection of religion (hifzh al-din)**

In this case, the members of TPST 3R in Blitar Regency, in the practice of their belief and faith in Allah SWT, are by managing waste by worshiping and making a living for the family and reducing unemployment. TPST 3R "Abdi Karya Mandiri" has a fundamental principle instilled in managing waste, namely making Allah SWT the main reason for maintaining and preserving nature. As a human being living on earth, Allah SWT is a leader who must take care of nature and the whole. In addition, the work of managing waste is intended for worship to Allah SWT because managing waste is a positive job. Managing waste is also intended to get wages to meet the needs of family life. Then, from the results of research in TPST 3R "Punokawan" also made the work of managing to waste a form of worship to Allah SWT. In addition, managing waste is also used as an excuse to reduce unemployment.

Based on the study results, two TPST 3R in Blitar Regency have implemented Islamic teachings. First, it is about the intention of worship. Allah SWT said in QS. al-Bayyinah verse 5 reads that they are not told except to worship Allah by purifying obedience to Him in (practicing) a straight religion and that they establish prayers and perform zakat. Thus, that is the straight religion (QS. al-Bayyinah: 5).

Then Allah SWT also said in QS. al-'Ankabut: 17 that read, then look for rizki by Allah's side (QS. al-'Ankabut: 17). The Prophet also said Imam Bukhari and Imam Muslim narrate this hadith that every practice depends on its intentions. Everyone will get what they want. Whoever emigrates because of Allah and His Messenger, his hijrah is for Allah and His Messenger. Whoever emigrates because he seeks the world or the woman he married, then moves to whom he goes (Baqi, 2017).

Second, he was namely making the work of managing waste as a goal to meet the needs of the family, following the word of Allah SWT in QS. al-Baqarah verse 233 reads the father's obligation to feed and clothe the mothers in a ma'ruf manner. (QS. al-Baqarah: 233). In addition, Ath-Thabarani once narrated from Abu Hurairah, who said: "When we (the companions) were sitting on the side of the Prophet (SAW), suddenly there was a young man who came out of the hill road. When we noticed him, we said, "If only this young man had used his strength and youth for jihad in the way of Allah!" Hearing the companions' words, the Prophet said: "Surely jihad in the way of Allah is killed (in war) only? Whoever works to support his parents, then he is in the way of Allah, who works to support his family, then he is in the way of Allah, but who works to luxury



(multiply treasures), then he is on the way of thought." (HR Thabrani, Al-Mu'jam Al-Ausath).

Third, it is to reduce unemployment. In this case, the noble intention to reduce unemployment can help government programs to reduce unemployment in Indonesia. Because it is known, the open unemployment rate (TPT) in February 2021 in Indonesia was 6.26 percent, down by 0.81 percentage points compared to August 2020.

From the explanation above, the two 3R TPSTs in Blitar Regency indirectly meet the principle of protection of religion because it has made the work of managing waste a form of worship to Allah SWT to meet the family's needs and reduce unemployment. Following the principle of religious protection, that has been explained that all actions that lead to the realization or more perfectness of religion in a person are called *maslahat* actions. Therefore, in the Qur'an, Allah SWT calls for promulgating and perfecting the religion (Syarifuddin, 2009).

### **Protection of the soul (hifzh al-nafs)**

Concerning the protection of the soul, maintaining health and the environment is also essential. We see TPST 3R "Abdi Karya Mandiri" who continues to struggle and survive to maintain environmental cleanliness. The community is also maintained health because the environment is beautiful and clean. The community is avoided diseases arising from waste that is not managed correctly, such as food poisoning, skin infections, worms, tetanus, hepatitis A, salmonella, dengue fever, trachoma, infections, and others.

From the study results, this is also the same as that done by TPST 3R "Punokawan". By managing the waste to reduce the volume of waste in the community, the community is healthy and avoids disease, and the environment is kept clean. Ibrahim et al. (2017) explained as the prophet Muhammad said that cleanliness is part of faith, the meaning of the above hadith is that actions related to one's cleanliness and purity are part of the faith. While the meaning of part of the faith, some scholars differ in opinion, some state that the reward of a person who maintains cleanliness and purity reaches the reward of half of faith. Another scholar explained that maintaining cleanliness and purity erases the mistakes that have been made on the condition that the perpetrator has faith. Therefore, cleanliness is part of faith. Another scholar explained that the meaning of the hadith above is that prayer is part of the faith, while cleanliness (holy) becomes a good condition of prayer. Therefore, cleanliness becomes part of the faith (Ibrahim et al., 2017).

Therefore, the activities carried out by the members of TPST 3R "Abdi Karya Mandiri" and members of TPST 3R "Punokawan" to maintain environmental cleanliness so that the community also avoids disease meet the principle of protection of the soul (*hifzh al-nafs*). Following the purpose of protecting the soul, according to as-Syatibi, the protection of the soul (*hifzh al-nafs*) says that life or soul is the essence of everything because everything in this



world rests on the soul. Therefore, the soul must be nurtured by the existence and improved in quality (Syarifuddin, 2009). Because with a clean environment, healthy physically and spiritually, the community can carry out all its activities.

### **Protection against reason (hifzh al 'aql)**

Based on research in TPST 3R "Abdi Karya Mandiri" through its waste management, meets the principle of protection against reason. Because with the management of waste comes innovation in managing waste, namely producing fuel oil from plastic waste. So many students or students who want to learn to learn about the process of making fuel. Students or students and waste treatment sites from other cities also study at TPST 3R "Abdi Karya Mandiri" regarding plastic waste processing. Learning about the processing of plastic waste can make TPST 3R "Abdi Karya Mandiri" a place to learn and benefit others. Then from the results of research in TPST 3R "Punokawan" which is still reasonably new in managing waste, it can be a means of learning for members to innovate and become a place to learn from other cities' waste treatment plants. Because the spirit of the members to continue innovating and managing waste as best as possible can benefit themselves, the community, and the village government.

Allah SWT also encourages his servants to study; this is contained in the Qur'an surah al-Mujadalah verse 11. Be spacious in the council. Then the field will undoubtedly Allah give you spaciousness. Moreover, when it says: "Stand up", then stand up. Indeed, Allah will exalt the believers among you and those given some degree of knowledge. Moreover, Allah knows what you are doing." (QS. al-Mujadalah: 11). A Hadith also mentioned the virtues of studying science in Islam. The Prophet said that whoever goes down the path of seeking knowledge, Allah will make it easy for him to go to heaven. From the description, it can be concluded that waste management is a valuable means of learning for members, communities, students, and environmental activists from other cities if associated with maqashid shari'ah then included in the protection of reason (hifzh al-'aql). Following the understanding of the protection of the soul according to as-Syatibi, the reason is an essential element of human life because reason distinguishes man from other creatures of God. Therefore, God tells the man to always take care of him. Any form of action that leads to the form and perfectness of reason is a good deed or maslahat. One of improving the quality of reason is to study or learn (Syarifuddin, 2009).

### **Protection of offspring (hifz al-nasl)**

Raising offspring is a crucial thing to do, especially in the present. Based on the results of research on TPST 3R "Abdi Karya Mandiri" is a place of learning facilities and a place that prioritizes the cleanliness of the environment by keeping it clean and beautiful, is a form of maintenance for offspring. They were especially providing learning about sustainable waste management that learner must maintain scientifically and continue to their descendants and others.





Similarly, the results of research in TPST 3R "Punokawan" with the maintenance of the environment to stay clean and make waste treatment sites a place to learn for members and others to innovate and still maintain their knowledge. So that the knowledge learned can be helpful for others and future generations, following the theory of protection of offspring, that protecting offspring is part of the primary needs of humans. This descendant will continue the generation of humans on the face of the earth. Arrangements on descent are necessary so that later the descendants can continue the function of the caliphate. The maintenance of offspring also promotes noble behaviours that humans must carry out (Sodiqin, 2012).

Chapra (2008) said that policies in the maintenance of offspring are needed so that the creation of a quality generation can be realized through marriage and families with integrity, namely with the certainty of maternal health and adequate nutrition for the development of children to meet the needs of life with sustainable development activities with the creation and guaranteeing the availability of economic resources for current and future generations, clean and healthy environment with the concept of environmentally friendly and sustainable development, free from conflict and security guarantees.

Thus, waste management activities in TPST 3R "Abdi Karya Mandiri" and TPST 3R "Punokawan" indirectly have an element of protection against offspring. Because the second member of TPST 3R has indirectly helped spread his knowledge about waste management to the community, students, members of the new TPST 3R, and environmental activists from everywhere, the science is passed down to others. So, the science continues to be hereditary because spreading science in managing sustainable waste can make the community and later generations better at managing waste so that the environment becomes clean and free from environmental pollution.

### **Protection of Treasures (hifzh al-mal)**

An essential need in their life is a treasure. Because with the existence of treasure, man can meet his needs, the welfare of his family, and his affairs with fellow humans. According to as-Syatibi, the treasure is needed by humans because without human treasures (eating), it is impossible to survive. The results showed that waste management in TPST 3R "Abdi Karya Mandiri" with innovation and processed waste results can produce products of economic value and can open jobs for people who need work. The members also get more wages than processed waste, which can meet their needs. Then from the research results at TPST 3R "Punokawan", the establishment of TPST 3R can also open job openings for the community.

Moreover, from the waste management results, the members, in addition to getting wages from residents, also get wages from product sales results. From the findings, it can be concluded that waste management at TPST 3R "Abdi Karya Mandiri" and TPST 3R "Punokawan" can be categorized as protection against the



property because members are fulfilled their lives from the waste management. Following the protection of assets, according to the Syatibi, the property is a very human need because, without wealth (eating), humans cannot survive (Syarifuddin, 2009).

### **Circular Economy Waste Management Analysis at TPST 3R Blitar Regency**

According to Preston (2012), a Circular Economy is an approach that will change the function of resources in the economy. Waste from the factory will be valuable input for other processes, and products can be repaired, reused, or improved instead of discarded (Ghosh, 2020).

According to Ellen MacArthur Foundation, the economic design currently starts with the distribution of wealth, which has historically been uneven. Because resource consumers are primarily from the most advanced regions (western society) while resource owners come from the global area, in this case, the ingredients are cheaper than human labour costs, so many producers use these materials. The consequences of cheap materials or expensive human labour costs result in the neglect of recycling, reuse, and much emphasis on waste. Accounting regulations and fiscal rules also support this economic model because there is no rule to burden the producers with externalities. Therefore, producers are less compelled to consider external costs for their production. In general, this linear economy is called take-make-dispose, which takes the resources needed, makes items for sale, gets profits, and disposes of everything that is not needed (Sariatli, 2017). Circular economy is a concept that is feasible, sustainable, and able to overcome a challenge today. The circular economy concept allows reducing waste and rolling back components of goods by design through closed circles and cascade approaches that contain economic dependence on material and energy inputs, improving economic system resilience, environmental preservation, supplying ever-increasing community demand and improving operating capabilities and production cost efficiency (Sariatli, 2017).

The volume of waste that continues to increase makes waste a problem that needs to be taken seriously. If not managed properly, waste can also lead to disaster. So, it needs proper and wise handling to manage waste properly. Currently, 3R (Reduce, reuse, recycle) waste management, or 3M (reduce, reuse, recycle), has become popular because the concept is to manage waste that can still be used and does not accumulate in landfills.

Wise waste management will be able to minimize environmental damage and improve the economic level of the public. A variety of waste processing is tested to obtain the best and safe results. Here are some conventional waste destruction efforts that are widely applied in Indonesia. It is also sustainable with the circular economy concept, which carries the concept of a sustainable economic circle. TPST 3R, as one of the places that manage waste with the 3M concept, is deemed able to help rotate the economic cycle so that the waste



circulating in the environment can be adequately managed and become a sustainable product – considering that the number of products produced by the industry still uses the linear economy concept or there are still many industries that produce FMCG (fast-moving customer goods) products.

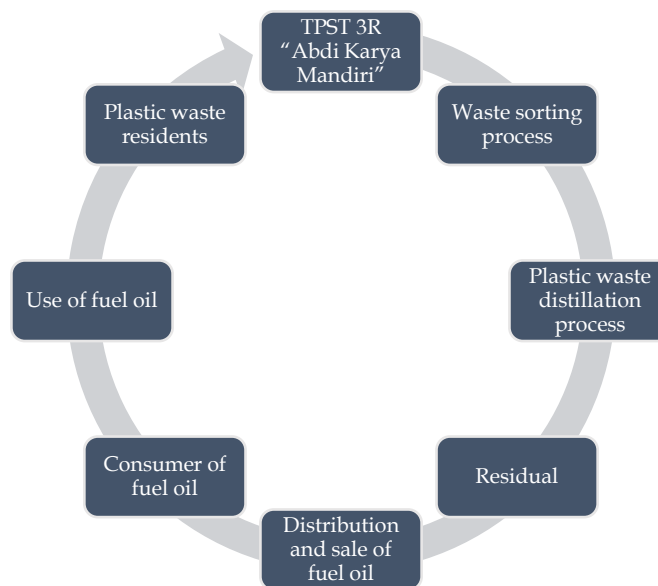
### **TPST 3R “Abdi Karya Mandiri”**

TPST 3R "Abdi Karya Mandiri" is a TPST that manages the waste of Wlingi Village residents. The waste is managed and processed by TPST members to produce a product that is compost and fuel oil in the form of kerosene, premium, and diesel fuel. Waste management follows the circular economy concept, which carries the concept of sustainability and renewable. Considering the process of making the fuel itself is made from trace fossil plants and animals processed naturally. It makes the fuel oil that we usually know into a non-renewable material.

The innovation created by TPST 3R "Abdi Karya Mandiri" can be a solution to maintain non-renewable natural resources that are decreasing and reduce the problem of more and more plastic waste. Here is the process of waste management in TPST 3R "Abdi Karya Mandiri" following the stages of Integrated Waste Management. Prevent; In the process of prevention, TPST 3R "Abdi Karya Mandiri" tries to reduce the waste in the TPS so as not to be wasted too much into the TPA. TPST 3R "Abdi Karya Mandiri" sorts plastic waste and waste that can still be used for recycling. The waste in the landfill is waste that is not feasible, or that is difficult to recycle. In addition, the Blitar Regency Environmental Agency conducts prevention by disseminating to the community to reduce the use of difficult-to-decompose goods such as plastic so that the waste wasted to the TPS or TPST is an unused waste. Reuse; The reuse process carried out by TPST 3R "Abdi Karya Mandiri" is by sorting items that are still feasible or can still be used, which are then sold back to garbage collectors. Such as plastic bottles, glass bottles, items made of iron, and cardboard. Recycle; TPST 3R "Abdi Karya Mandiri" "recycles citizens' waste by being divided into two groups, namely organic waste and inorganic waste. Organic waste is compost, and inorganic waste is used as fuel oil. Then the recycling results can be used by TPST 3R "Abdi Karya Mandiri", especially the results of plastic recycling, which can be used to transport waste from residents. Residents also use compost and fuel oil produced for agricultural and other needs. Energy Recovery; In this case, the capture of energy carried out by TPST 3R "Abdi Karya Mandiri" is by practicing the utilization of plastic waste into fuel oil, the background of the utilization of plastic waste began because of the large amount of waste piled up in TPST 3R "Abdi Karya Mandiri", and collectors are reluctant to buy because the stock is still too much. Thus, creating a plastic processing machine that produces fuel oil. Making the tool so that the garbage is more useful does not stop at TPST 3R "Abdi Karya Mandiri" and just sold to garbage collectors. Thus, from the plastic waste can get fuel oil in diesel, premium, and kerosene. Disposal; Waste is the result

that always results from the waste management process. TPST 3R "Abdi Karya Mandiri" has a way to not dispose of the waste. The only waste that is no longer used is wasted in the landfill. Waste generated from the recycling process used by members of TPST 3R "Abdi Karya Mandiri" to be made into brick and used by students to make handicrafts in the form of key chains.

It is as good as the objective of the concept of circular economy, which is a concept that is feasible, sustainable, and capable of addressing a challenge today. The circular economy concept enables reducing waste and turning back components of goods by design through closed circles and cascade approaches containing economic dependence on input materials and energy (Sariatli, 2017).



**Figure 2:** Circular Economy Process in TPST 3R "Abdi Karya Mandiri"

Figure 2 shows that plastic waste managed by TPST 3R "Abdi Karya Mandiri" becomes the primary material processed into fuel oil and enjoyed by residents. Residents will indirectly throw plastic waste back, and TPST 3R "Abdi Karya Mandiri" will also process the plastic waste. From the study results, it can be concluded that the Waste Management in TPST 3R "Abdi Karya Mandiri" is indirectly under the stage of Integrated Waste Management and describes the conformity with the concept of the circular economy.

### **TPST 3R "Punokawan"**

The citizens' garbage transported three times a day is sorted in TPST 3R. Plastic waste is still worth selling to garbage collectors, organic waste used as compost, and waste that cannot be managed burned in the combustion furnace. From the burning ash, TPST 3R "Punokawan" made a product in the form of a flower pot. In addition to making flower pots from the ashes of waste

incineration, TPST 3R "Punokawan" also makes flower pots from processing baby diaper waste. Moreover, it was then sold to the surrounding community.

Innovation can be a thing that can reduce waste circulating in the community into a product of economic value. Especially baby diaper garbage that sat is problematic because baby diapers are difficult to decompose, and many residents throw baby diaper garbage carelessly. It is also a solution to reduce the use of flower pots made of plastic because buyers' interest in flower pots is now significantly increased. The following is the waste management process at TPST 3R "Punokawan" by the stages of integrated waste management. Prevent; Prevention carried out by TPST 3R "Punokawan" is practiced in reducing the use of plastic products or items that are difficult to decompose. It is done by TPST 3R "Punokawan" by reducing waste in TPST 3R "Punokawan" not to being wasted directly in the landfill. Reuse; Reuse carried out by TPST 3R "Punokawan" is done by sorting garbage that can still be sold, such as cardboard and bottles. While the items that are still worth using are usually used again by members of TPST 3R "Punokawan". Recycle; The recycling process carried out in TPST 3R "Punokawan" has its way. In addition to organic waste that produces fertilizer, TPST 3R "Punokawan" recycles plastic waste into flower pots. In addition to recycling plastic waste into flower pots, TPST 3R "Punokawan" also recycles baby diaper waste. Energy recovery; In capturing energy, TPST 3R "Punokawan" is still in a gradual process. Considering TPST 3R "Punokawan" is still fairly new. However, TPST 3R "Punokawan" is ideal for capturing energy from waste combustion into electricity. Disposal; The final result or waste obtained from waste processing in TPST 3R "Punokawan" is reprocessed by members to be used as flower pot products. Waste management carried out by TPST 3R "Punokawan" is not directly by the circular economy concept because the products produced by TPST 3R "Punokawan" have a side of sustainability.

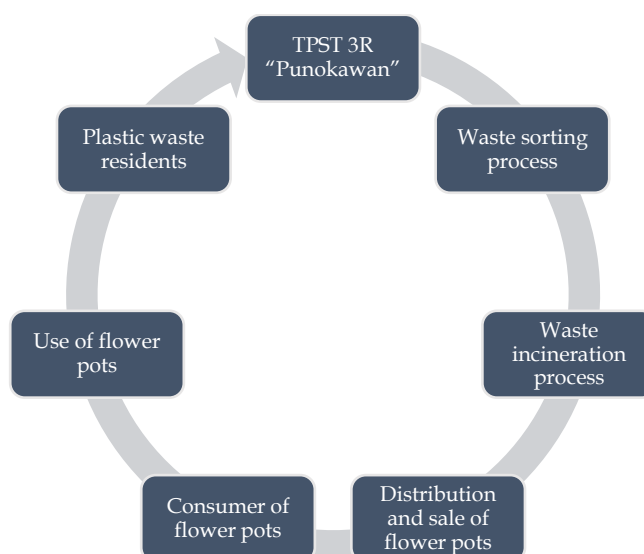


Figure 3: Circular Economy Process in TPST 3R "Punokawan"



Figure 2 shows no residual, so the concept of zero waste is also in waste management in TPST 3R" Punokawan. Such closed economic turnover is in line with the circular economy concept, where the circular economy concept allows for reducing waste and turning back components of goods by design. A closed circle and cascade approach that contains economic dependence on material and energy inputs increases the resilience of economic systems, preserves the environment, supplies increasing public demand, and improves operating capabilities (Sariatli, 2017).

## 5. Conclusions

Based on the five main elements of maqashid shari'ah, TPST 3R "Abdi Karya Mandiri "and TPST 3R" Punokawan" make Allah the main reason for protecting nature and the environment and make the work of managing to waste a form of worship (hifzh ad-din). Protection of the soul (hifzh al-nafs) both carry out environmental hygiene so that people also maintain their health because the environment is beautiful and clean and avoid disease. Protection against reason (hifzh al' aql) with TPST 3R becomes a learning place for students, students, or waste managers from other cities. Protection of offspring (hifz Al-nasl) provides learning about sustainable waste management that the learner must maintain and continue to his descendants and others. Protection of property (hifzh al-mal) by producing economic value products and opening job vacancies for people in need. Implementing waste management in TPST 3R "Abdi Karya Mandiri "and TPST 3R" Punokawan" has a rotating and interrelated production flow from upstream to downstream. In addition, the products produced have a sustainable and renewable side.

## References

- Baqi, M. F. A. (2017). *Shahih Bukhari Muslim*. Kompas Gramedia.
- Busyro, B. (2019). *Maqashid al-syariah : pengetahuan mendasar memahami masalah*. Prenadamedia.
- Chapra, M. U. (2008). *Development in the Light of the Maqasid Al-Shari'ah*. Islamic Research and Training Institute.
- Ghosh, S. K. (Ed.). (2020). *Circular Economy: Global Perspective*. Springer Singapore. <https://doi.org/10.1007/978-981-15-1052-6>
- Ibrahim, R., Mulyo, A. M. T., & Fatimah, L. (2017). Konsep Ramah Lingkungan dalam Perspektif Alquran, Hadis, dan Kitab Kuning di Pesantren. *MADANIA: JURNAL KAJIAN KEISLAMAN*, 21(2), 209. <https://doi.org/10.29300/madania.v21i2.578>
- Mutawali, M. (2017). Maqashid Al-Syari'ah : Logika Hukum Transformatif. *Jurnal Schemata*, 6(2), 117–139.
- Nurhayati, & Sinaga, A. I. (2018). *Fiqh dan Ushul Fiqh*. Prenadamedia.
- Waste Management, 1 (2008). <https://peraturan.bpk.go.id/Home/Details/39067/uu-no-18-tahun-2008>
- Rizos, V., Tuokko, K., & Behrens, A. (2017). The circular economy, a review of



- definitions, processes and impacts. In *Centre for European Policy Studies (Brussels, Belgium)* (2017/08). [https://www.ceps.eu/wp-content/uploads/2017/04/RR2017-08\\_CircularEconomy\\_0.pdf](https://www.ceps.eu/wp-content/uploads/2017/04/RR2017-08_CircularEconomy_0.pdf)
- Sariatli, F. (2017). Linear Economy Versus Circular Economy: A Comparative and Analyzer Study for Optimization of Economy for Sustainability. *Visegrad Journal on Bioeconomy and Sustainable Development*, 6(1), 31–34. <https://doi.org/10.1515/vjbsd-2017-0005>
- Sodiqin, A. (2012). *Fiqh dan Ushul Fiqh: Sejarah, Metodologi dan Implementasinya di Indonesia*. Beranda Publishing.
- Syarifuddin, A. (2009). *Ushul Fiqh*. Kencana Prenada.