



Islamic Republic of IRAN's Training Course:

Waste Management Auditing

**Based on INTOSAI Working Group on
Environmental Auditing Handbook:
Towards Auditing Waste Management**

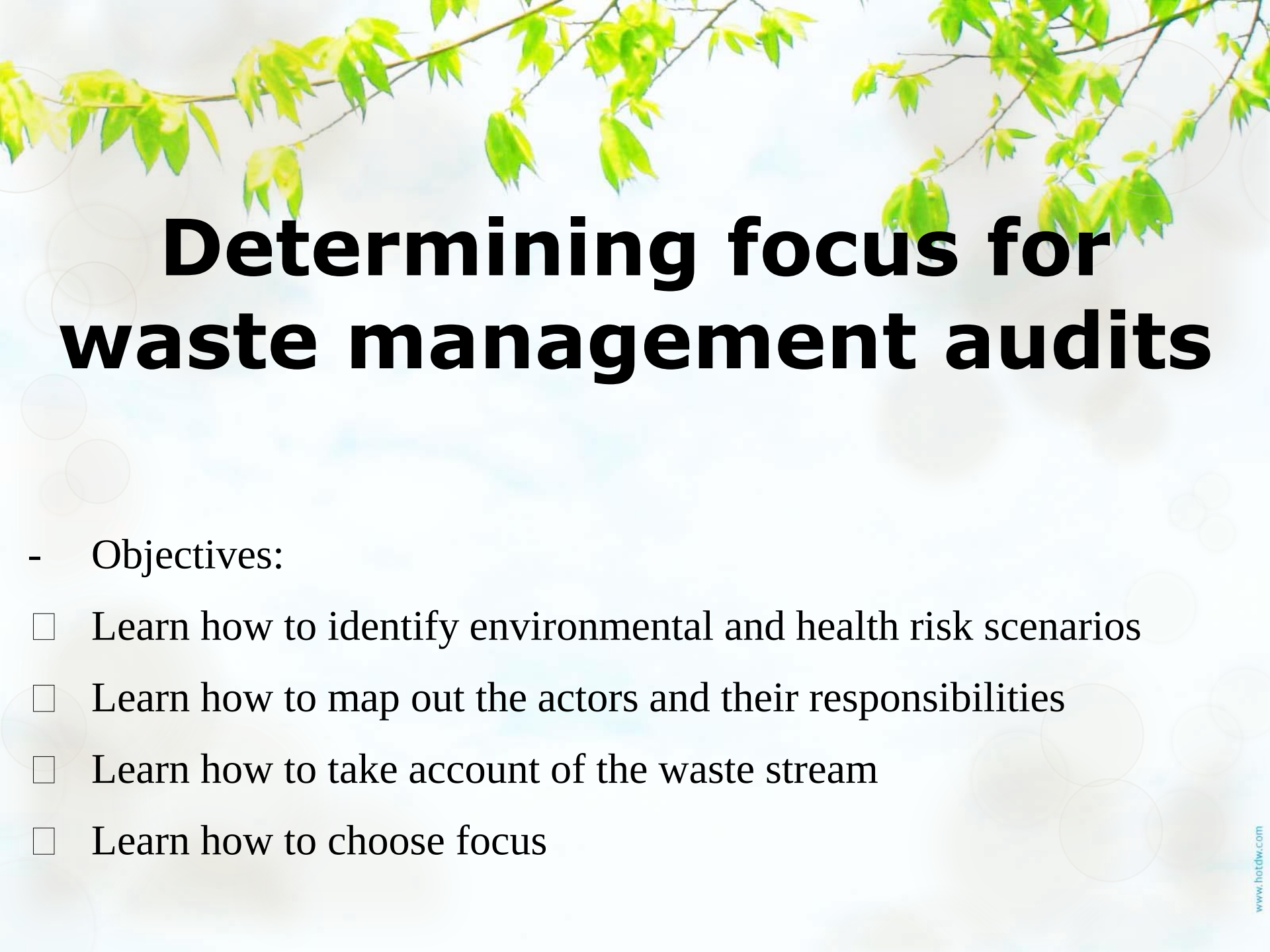
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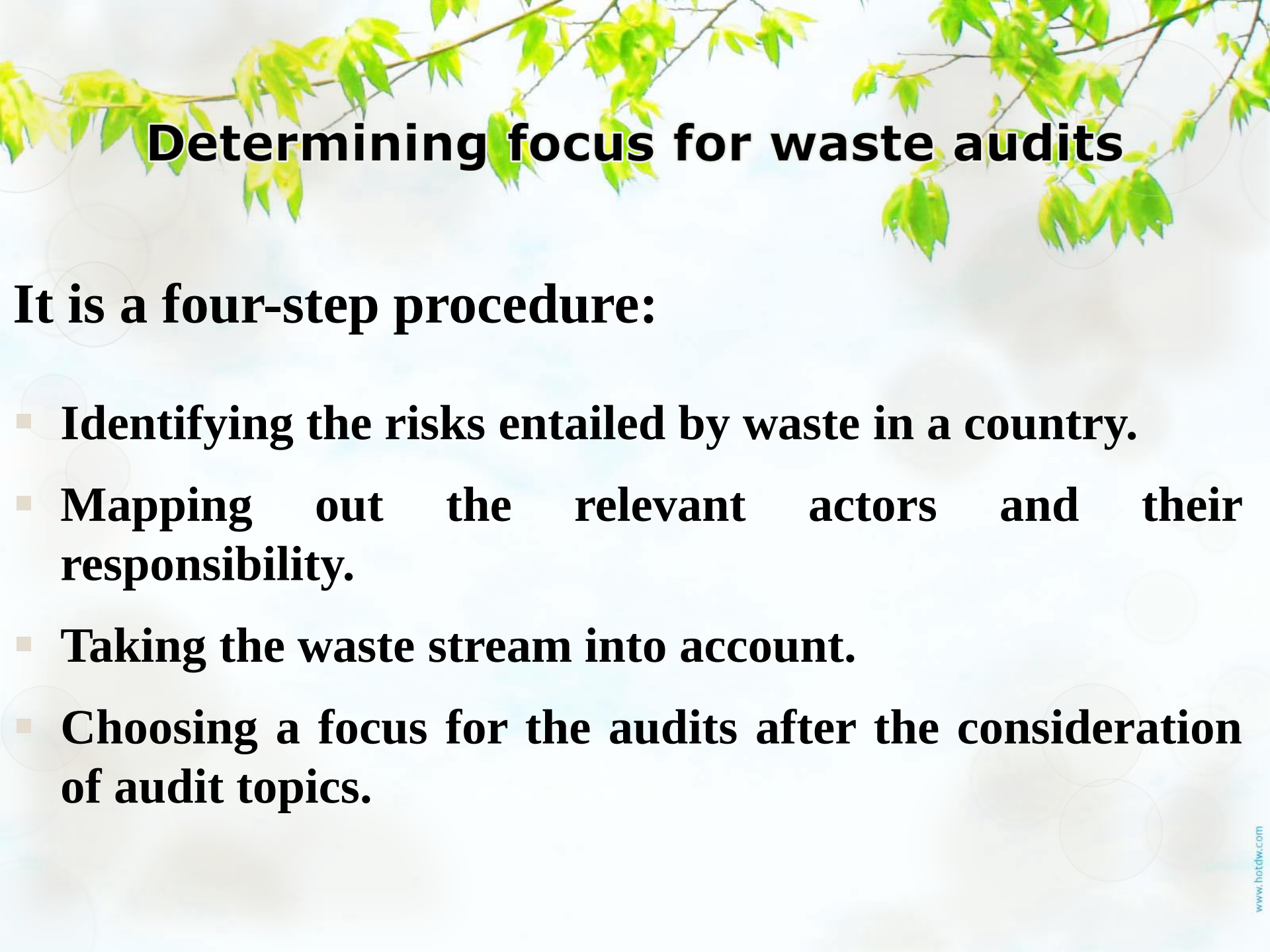
Main Topics

- **Determining focus for waste audits**
- **Audits of waste management**
- **Preparing waste management audit report**
- **Guidelines for planning of waste management audit**
- **Reviewing some best practices**
- **Workshop**



Determining focus for waste management audits

- Objectives:
 - ☐ Learn how to identify environmental and health risk scenarios
 - ☐ Learn how to map out the actors and their responsibilities
 - ☐ Learn how to take account of the waste stream
 - ☐ Learn how to choose focus



Determining focus for waste audits

It is a four-step procedure:

- **Identifying the risks entailed by waste in a country.**
- **Mapping out the relevant actors and their responsibility.**
- **Taking the waste stream into account.**
- **Choosing a focus for the audits after the consideration of audit topics.**



Determining focus for waste audits

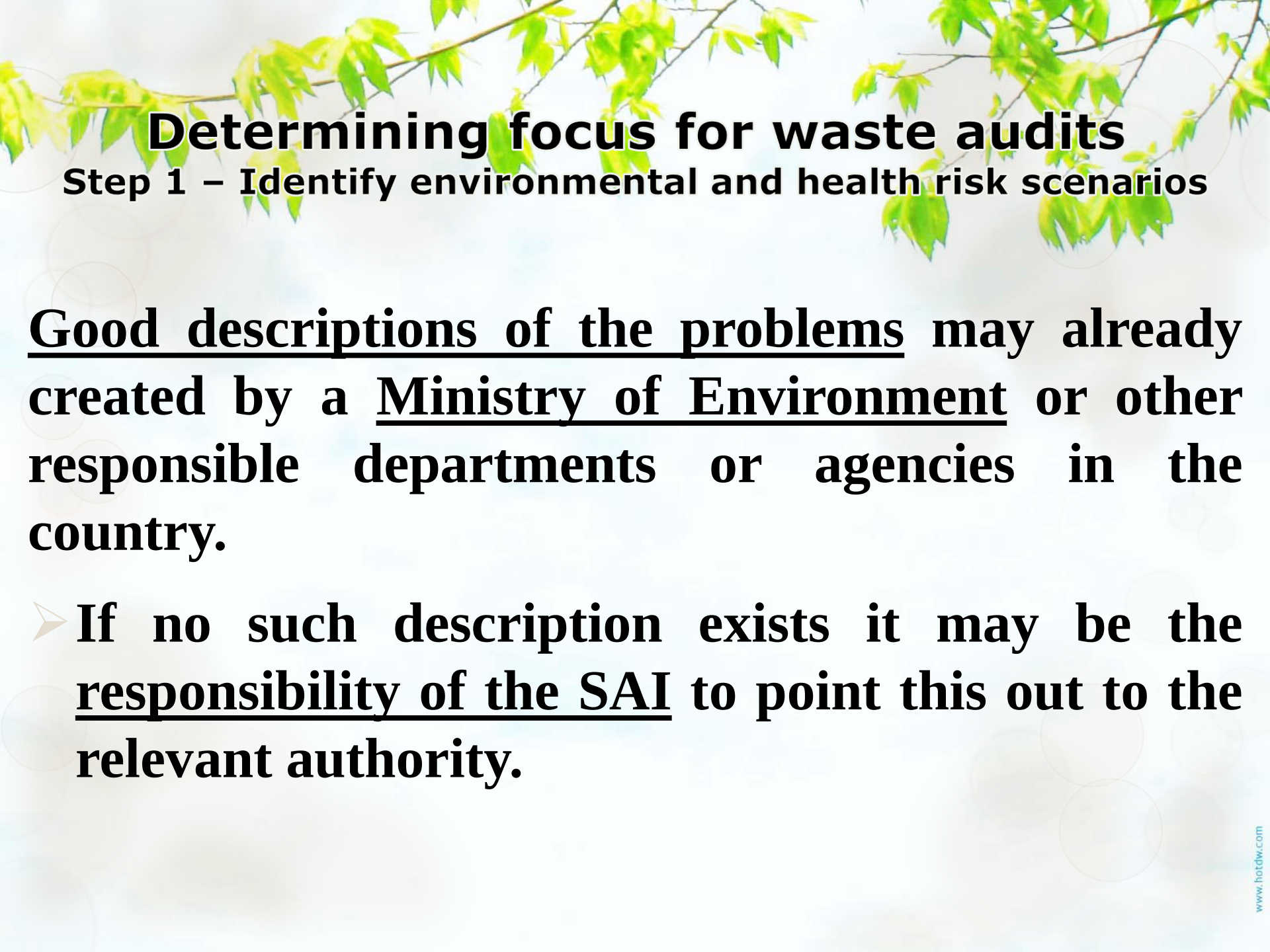
Step 1 – Identify environmental and health risk scenarios

First step :

- **Creating risk scenarios by identifying the main problem areas ...**

If there are serious problems at basic levels of waste handling:

- **Possible for the SAI to address in order to raise consciousness about it.**



Determining focus for waste audits

Step 1 – Identify environmental and health risk scenarios

Good descriptions of the problems may already created by a Ministry of Environment or other responsible departments or agencies in the country.

- **If no such description exists it may be the responsibility of the SAI to point this out to the relevant authority.**



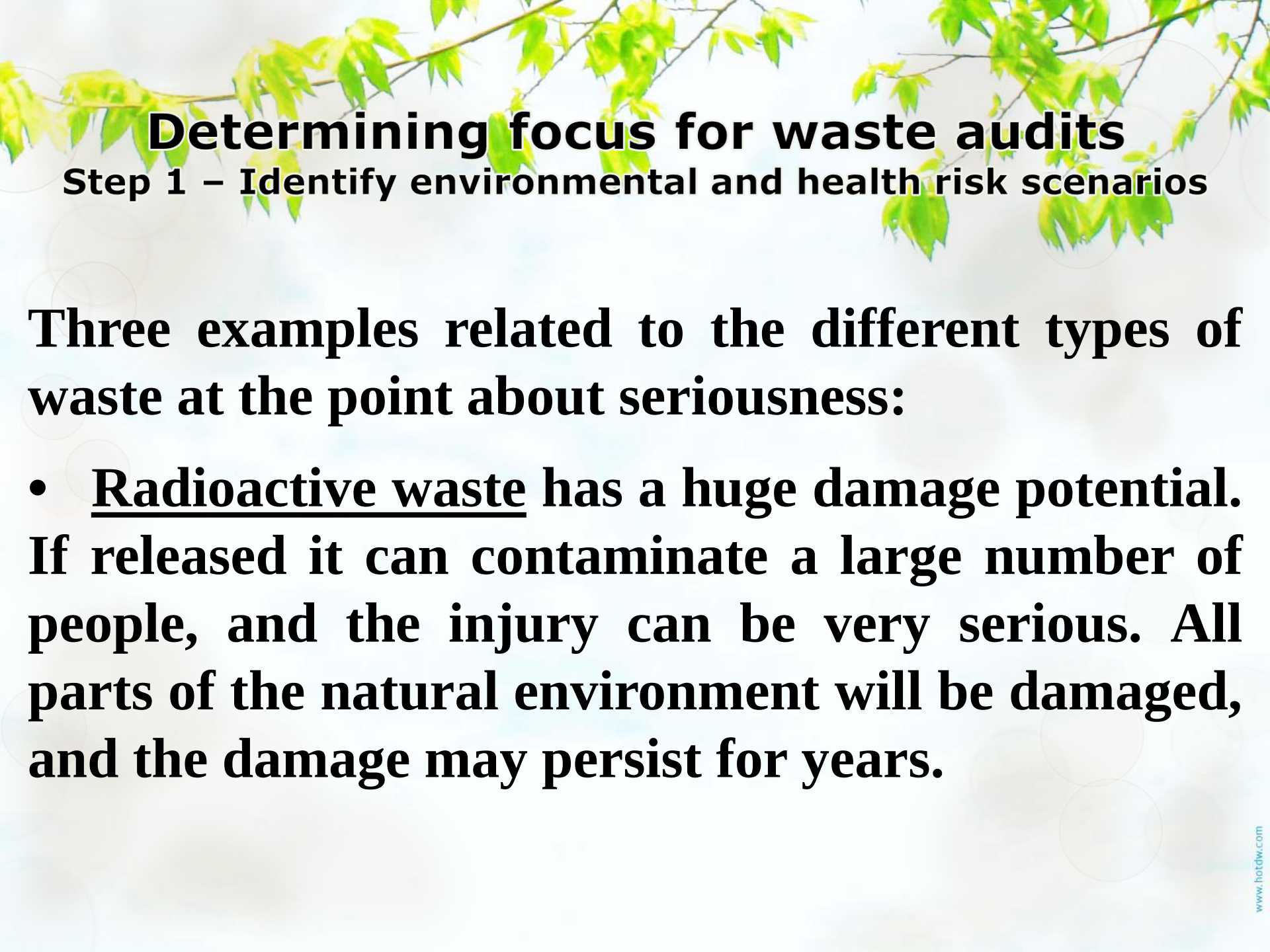
Determining focus for waste audits

Step 1 – Identify environmental and health risk scenarios

1.1. Assessing the seriousness of the possible damage from waste:

The seriousness relates to both people and the environment.

- **For people, it may be divided in two aspects:**
 - **The number of people who may be affected**
 - **The severity of the harm they may suffer.**

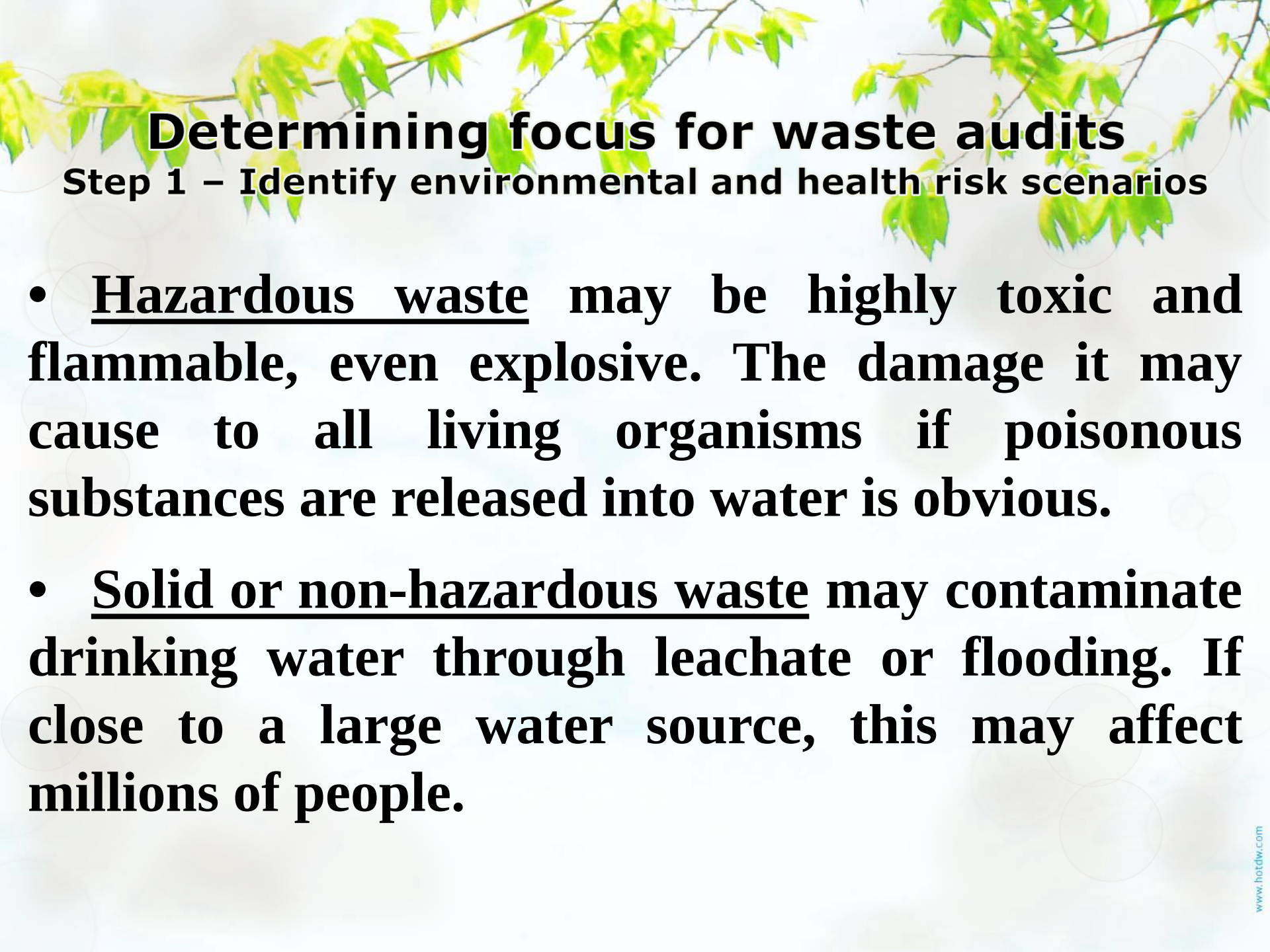


Determining focus for waste audits

Step 1 – Identify environmental and health risk scenarios

Three examples related to the different types of waste at the point about seriousness:

- **Radioactive waste has a huge damage potential. If released it can contaminate a large number of people, and the injury can be very serious. All parts of the natural environment will be damaged, and the damage may persist for years.**



Determining focus for waste audits

Step 1 – Identify environmental and health risk scenarios

- **Hazardous waste** may be highly toxic and flammable, even explosive. The damage it may cause to all living organisms if poisonous substances are released into water is obvious.
- **Solid or non-hazardous waste** may contaminate drinking water through leachate or flooding. If close to a large water source, this may affect millions of people.



Determining focus for waste audits

Step 1 – Identify environmental and health risk scenarios

1.2. Detect the probability of damage from waste:

For different kinds of waste, There is introduced some cases below:

- **Hazardous waste :**

- **The auditor should seek to find a way to get management and politicians to focus on these dangers.**

Determining focus for waste audits

Step 1 – Identify environmental and health risk scenarios

- **Radioactive waste :**

- **Usually the systems relating to radioactive waste are of high quality, but small faults in the systems can have grave consequences, and so the requirements for the systems must be high.**

- **For all types of waste:**

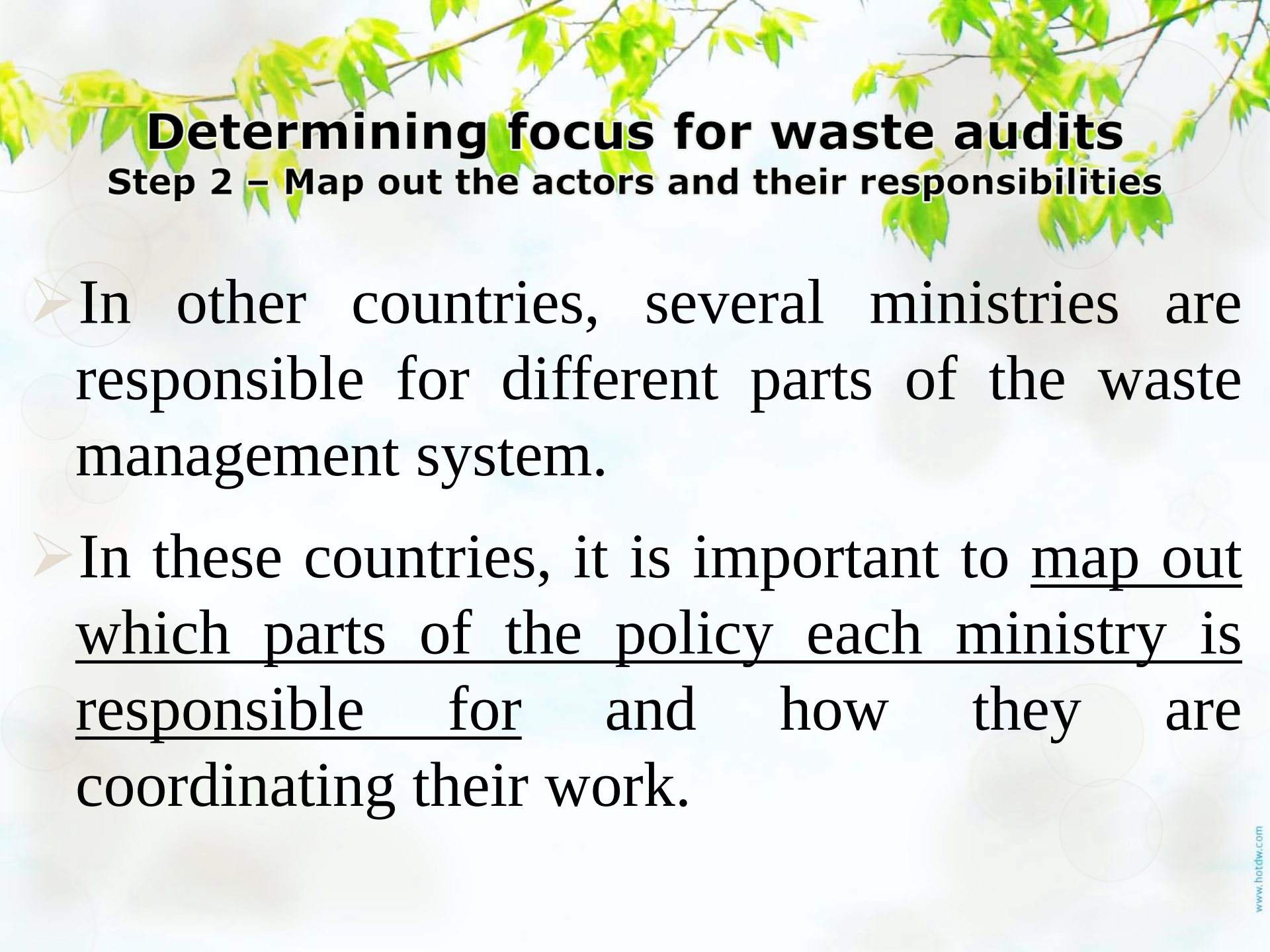
- **When considering the risk picture, a SAI should consider the likelihood that this may occur.**



Determining focus for waste audits

Step 2 – Map out the actors and their responsibilities

- **Most countries have a legislative body responsible for formulating environmental policies.**
- **International agreements provide directions for the national legislative work.**
- **In many countries one government authority, usually called the Ministry of the Environment.**



Determining focus for waste audits

Step 2 – Map out the actors and their responsibilities

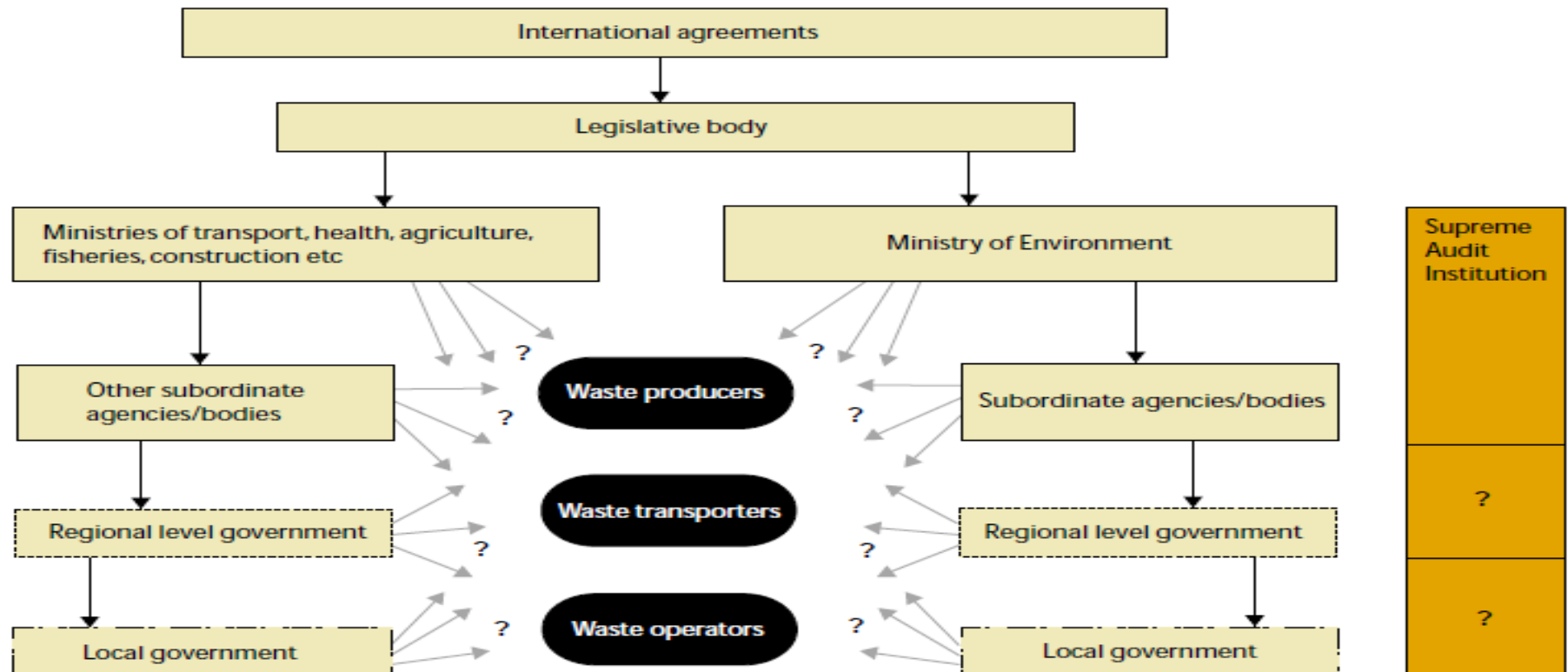
- In other countries, several ministries are responsible for different parts of the waste management system.
- In these countries, it is important to map out which parts of the policy each ministry is responsible for and how they are coordinating their work.

Determining focus for waste audits

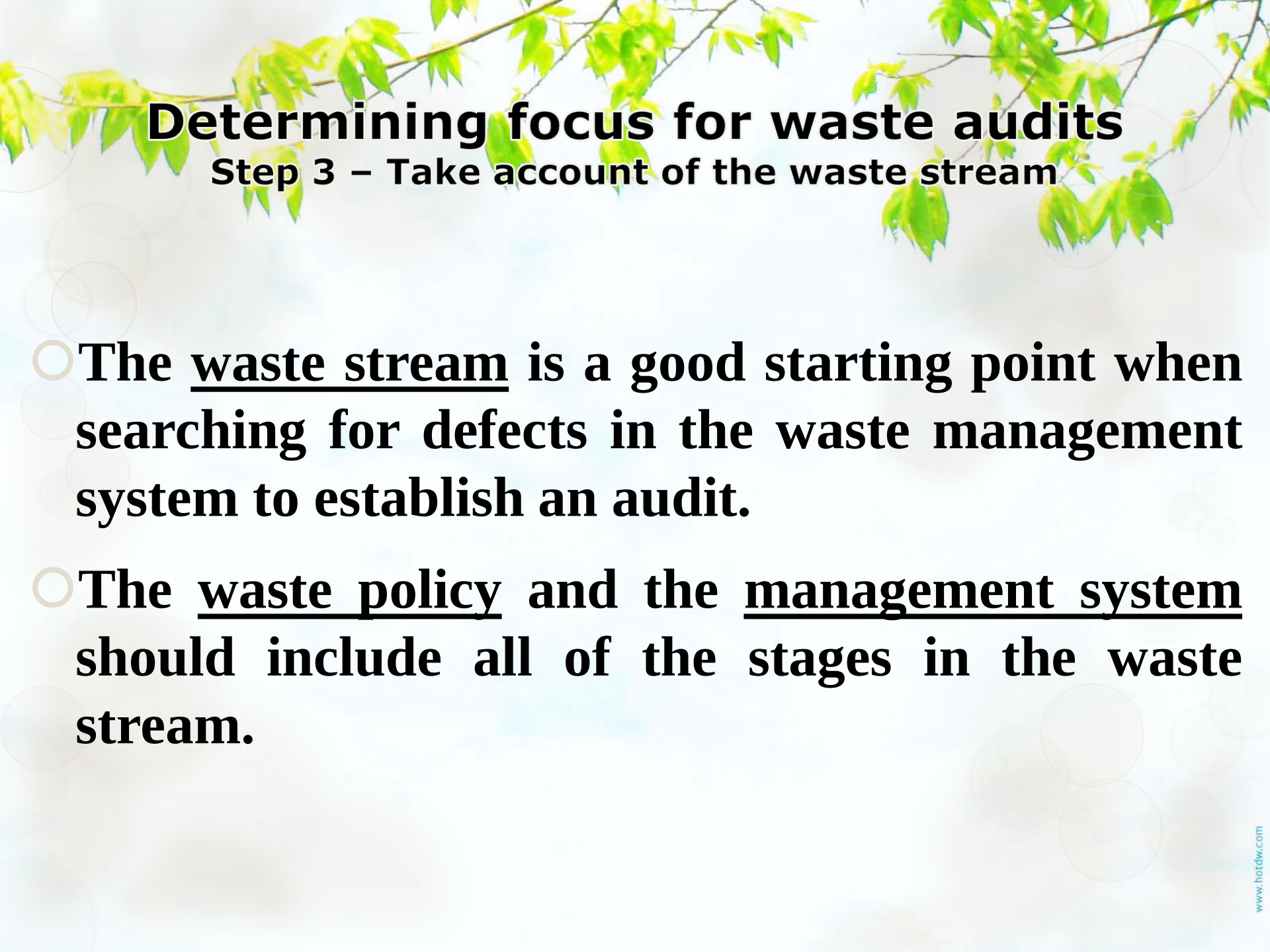
Step 2 – Map out the actors and their responsibilities

- Depending on the type of waste, the authorities that administer or regulate the waste may be at the regional or provincial level or at the local or municipal level.
- All actors should be mapped out, even though some of these actors may not come within the core of the SAI's mandate to audit.
- In a basic chart, the inclusion of waste generators, waste transporters and waste operators is sufficient. All of these actors may be private or public.

Graphical presentation of relevant actors associated with waste management.



Waste management chart that includes the waste handlers



Determining focus for waste audits

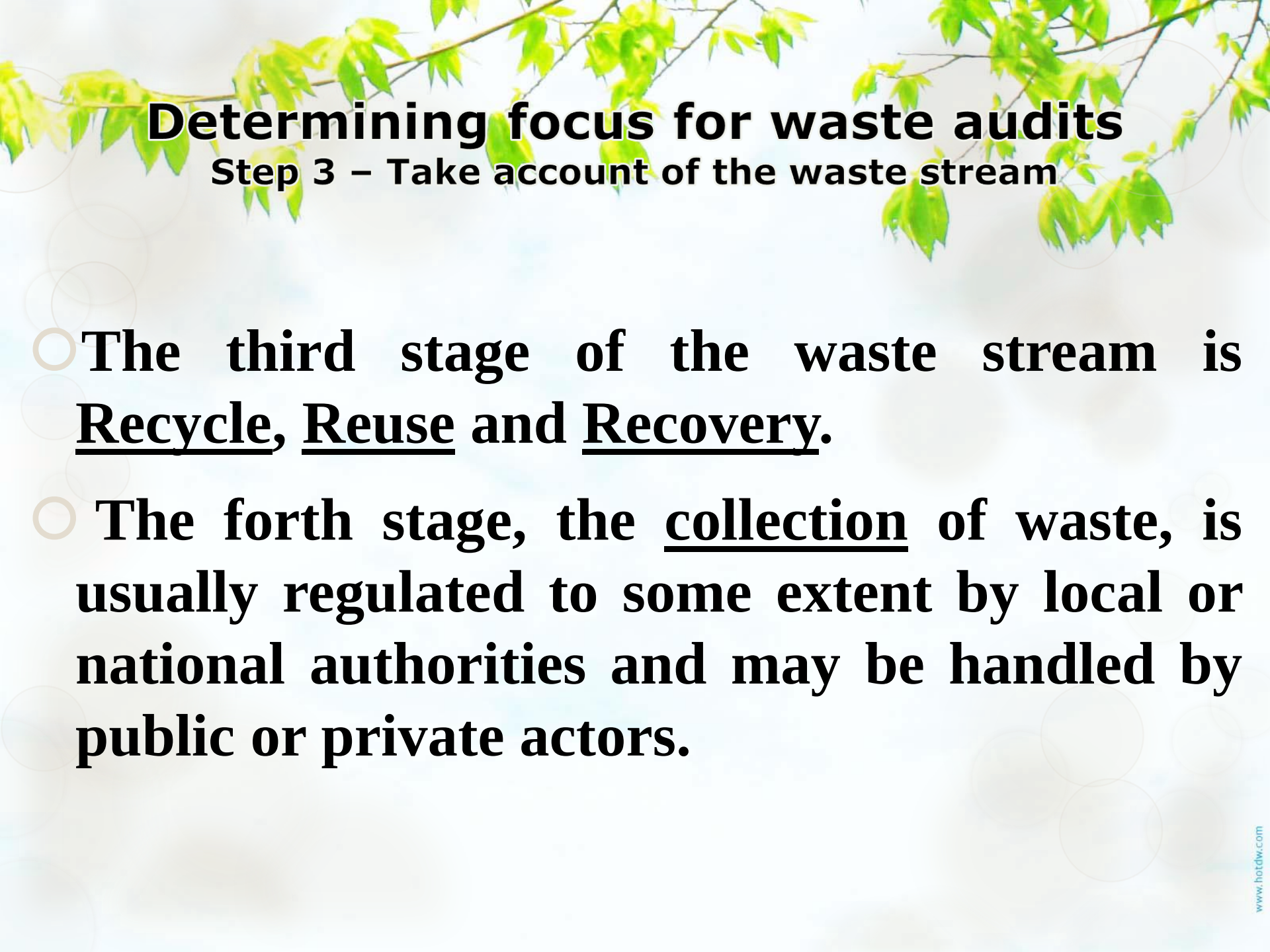
Step 3 – Take account of the waste stream

- **The waste stream is a good starting point when searching for defects in the waste management system to establish an audit.**
- **The waste policy and the management system should include all of the stages in the waste stream.**

Determining focus for waste audits

Step 3 – Take account of the waste stream

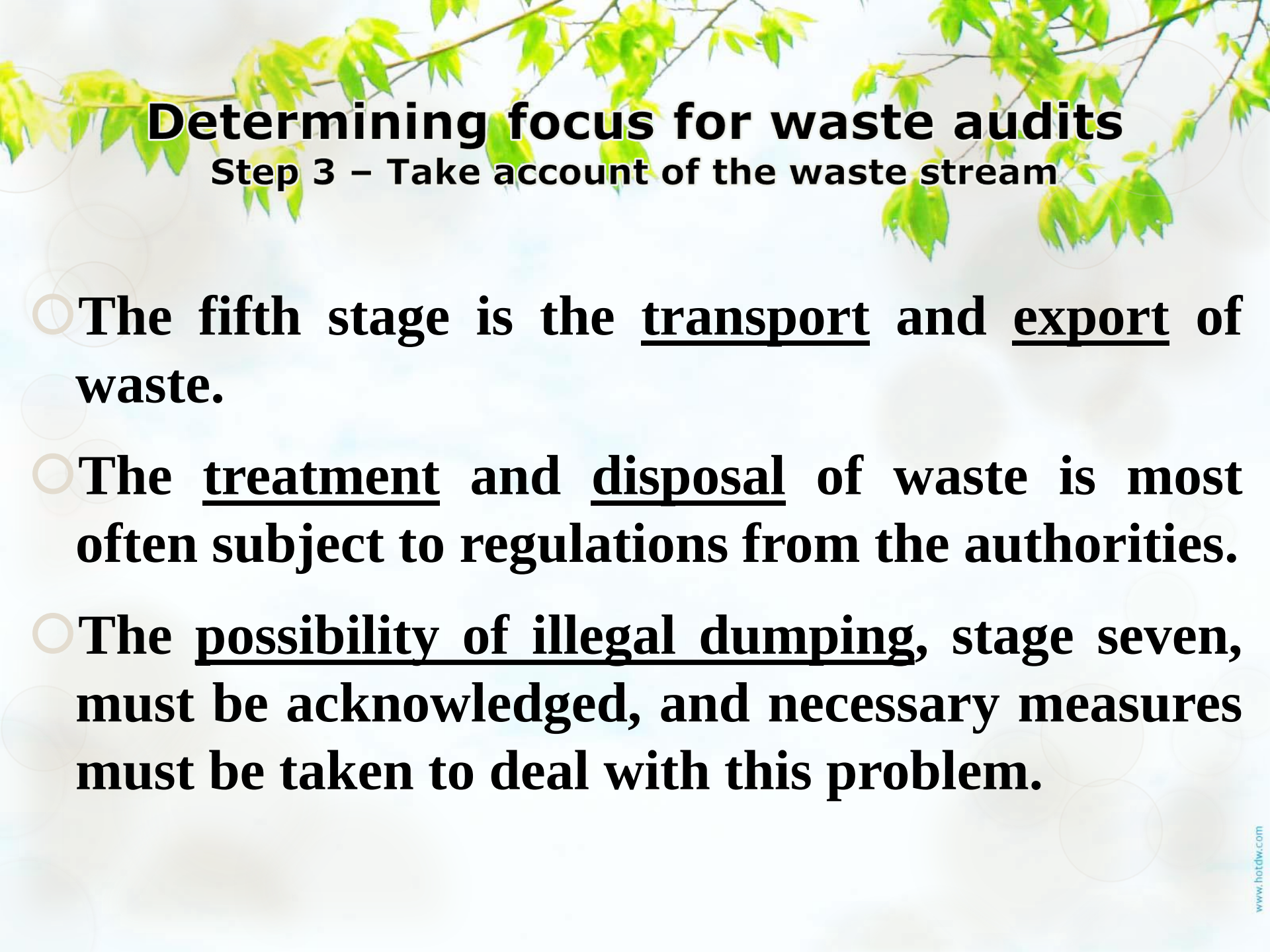
- **Stage one in the waste stream is prevention and leads to sustainable use of resources in general.**
- **The second stage is the generation of waste. The government could influence the amount of waste generated through economic incentives, where the efficient use of resources.**



Determining focus for waste audits

Step 3 – Take account of the waste stream

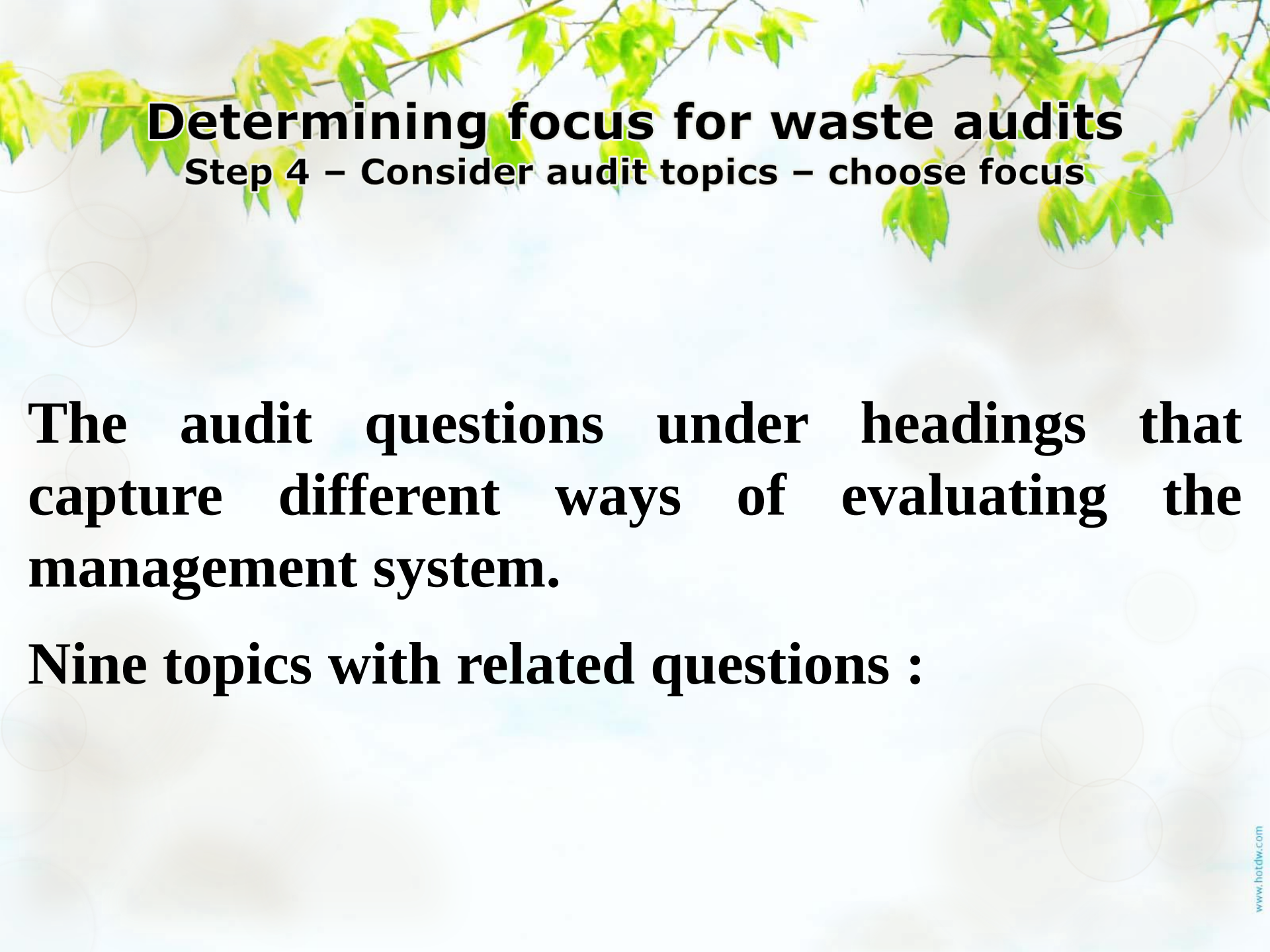
- **The third stage of the waste stream is Recycle, Reuse and Recovery.**
- **The forth stage, the collection of waste, is usually regulated to some extent by local or national authorities and may be handled by public or private actors.**



Determining focus for waste audits

Step 3 – Take account of the waste stream

- **The fifth stage is the transport and export of waste.**
- **The treatment and disposal of waste is most often subject to regulations from the authorities.**
- **The possibility of illegal dumping, stage seven, must be acknowledged, and necessary measures must be taken to deal with this problem.**

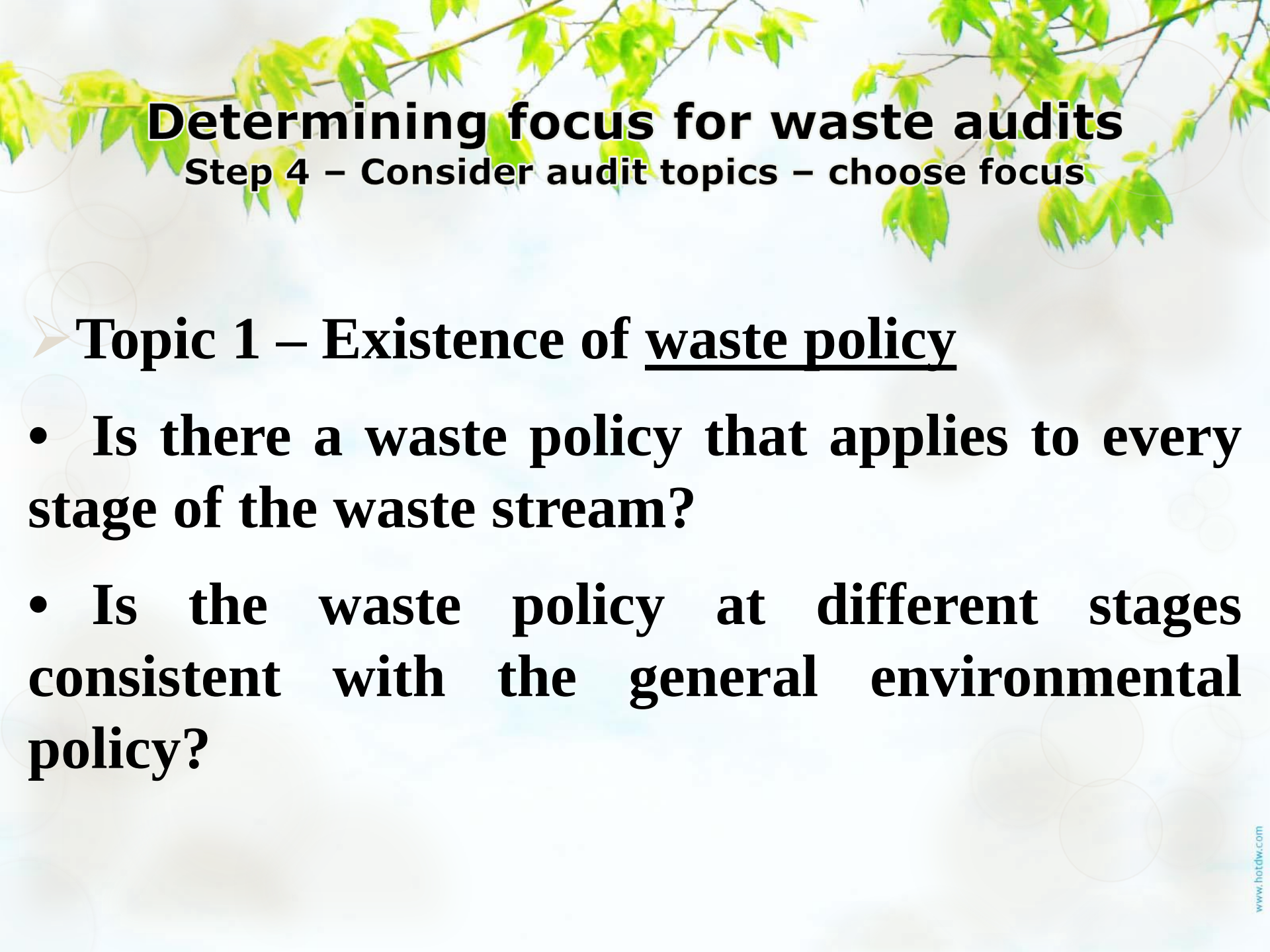


Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

The audit questions under headings that capture different ways of evaluating the management system.

Nine topics with related questions :



Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

➤ Topic 1 – Existence of waste policy

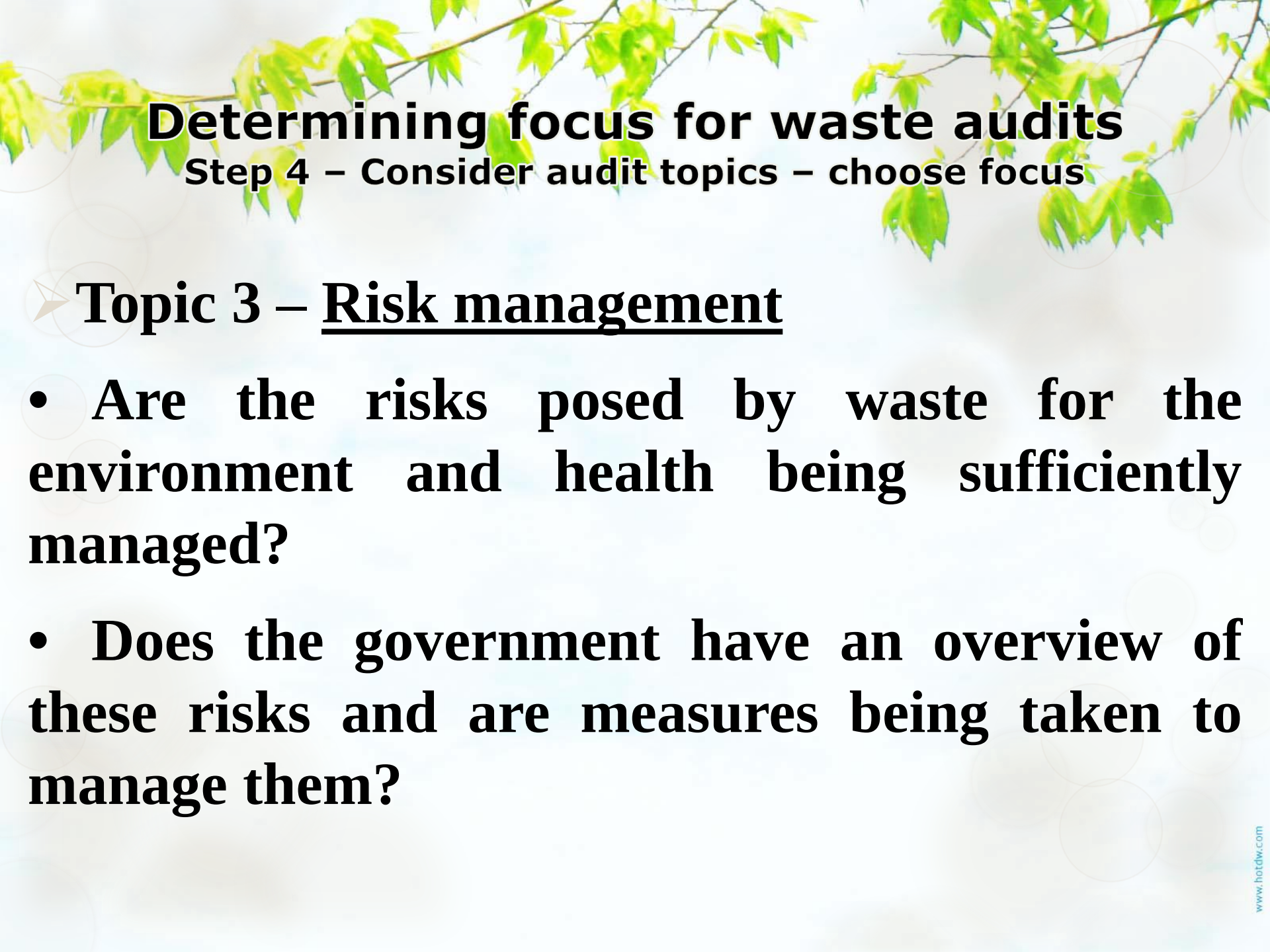
- Is there a waste policy that applies to every stage of the waste stream?**
- Is the waste policy at different stages consistent with the general environmental policy?**

Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

➤ Topic 2 – Compliance with national environmental policy

- Have the general environmental policy and the waste policy been reflected, specified, and put in concrete terms in instruments such as legislation, plans, budgets and financial tools?**
- Are there any gaps or inconsistencies in the waste legislation?**



Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

✦ Topic 3 – Risk management

- Are the risks posed by waste for the environment and health being sufficiently managed?**
- Does the government have an overview of these risks and are measures being taken to manage them?**

Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

➤ Topic 4 – Quality of the implementation process

- Have policies and regulations been implemented efficiently and effectively?**
- Have there been delays in the implementation and have the resources been well-spent?**
- Did the government conduct sufficient impact assessments or other prior investigations before implementing a new waste initiative?**

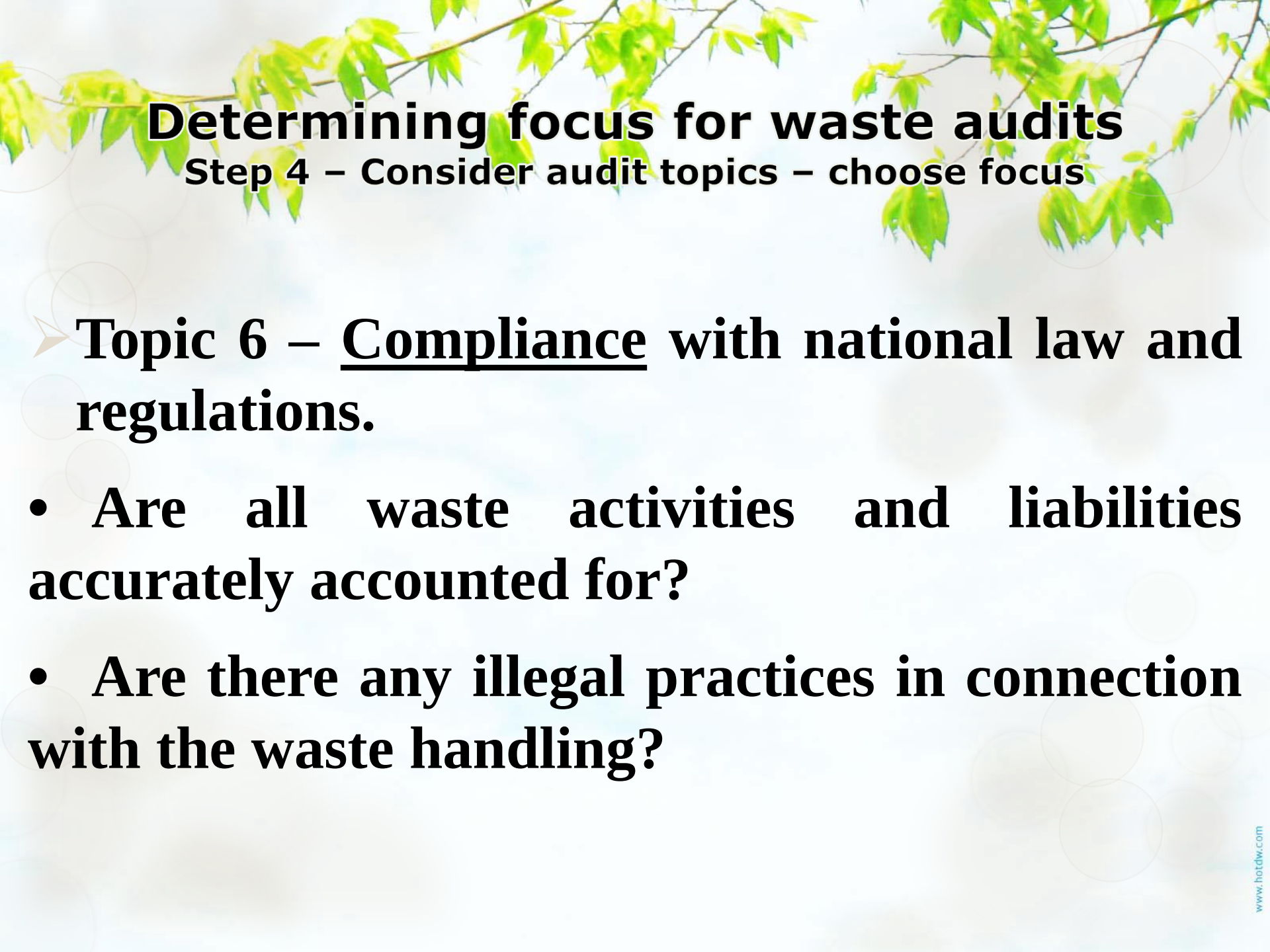
Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

➤ Topic 5 – Performance of the waste management system

- Is the structure of the waste management system appropriate for solving the challenges that waste entails?**
- Is there a distribution of responsibility, and, if so, does this influence accountability?**

...

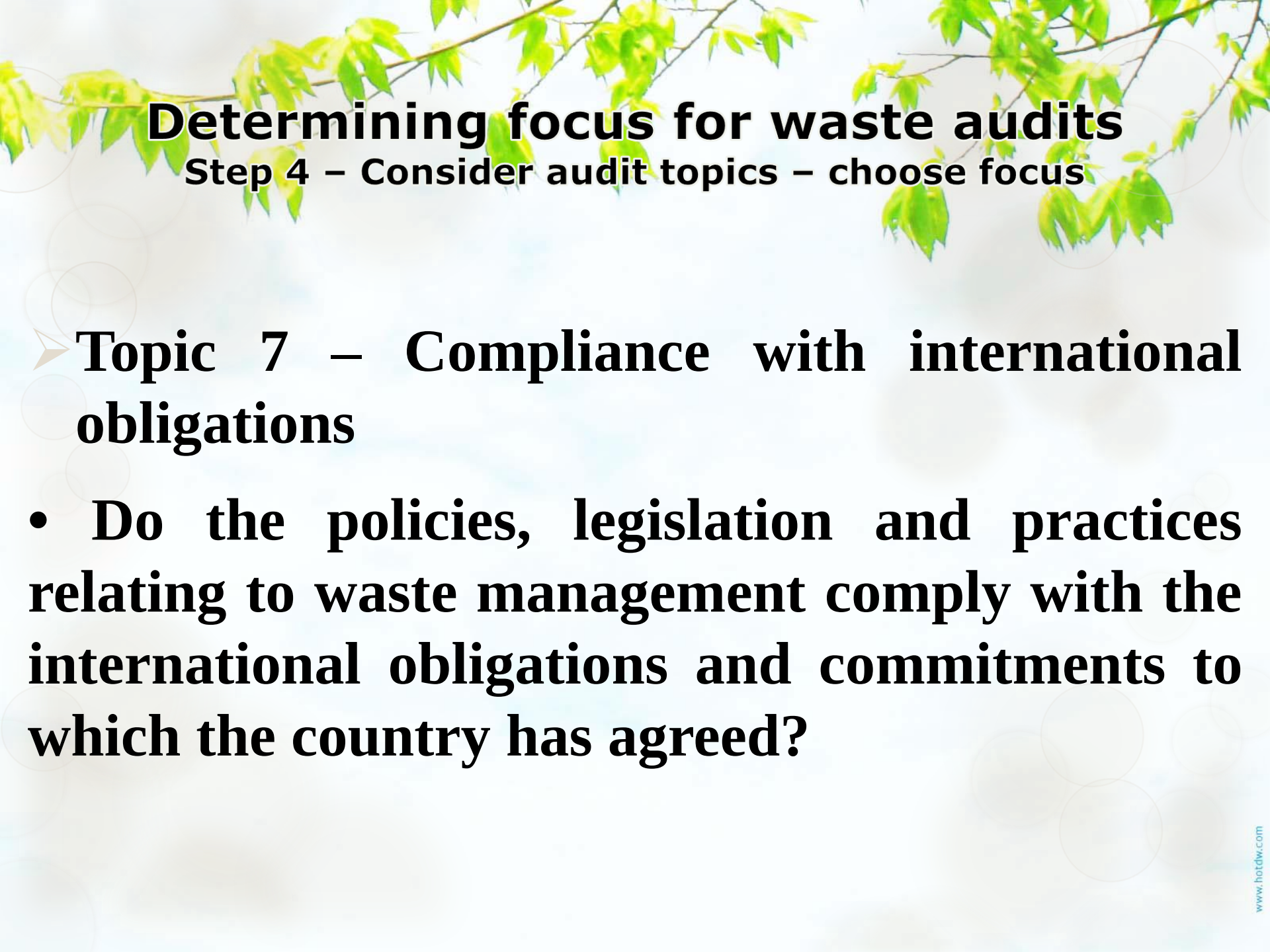


Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

➤ Topic 6 – Compliance with national law and regulations.

- Are all waste activities and liabilities accurately accounted for?**
- Are there any illegal practices in connection with the waste handling?**

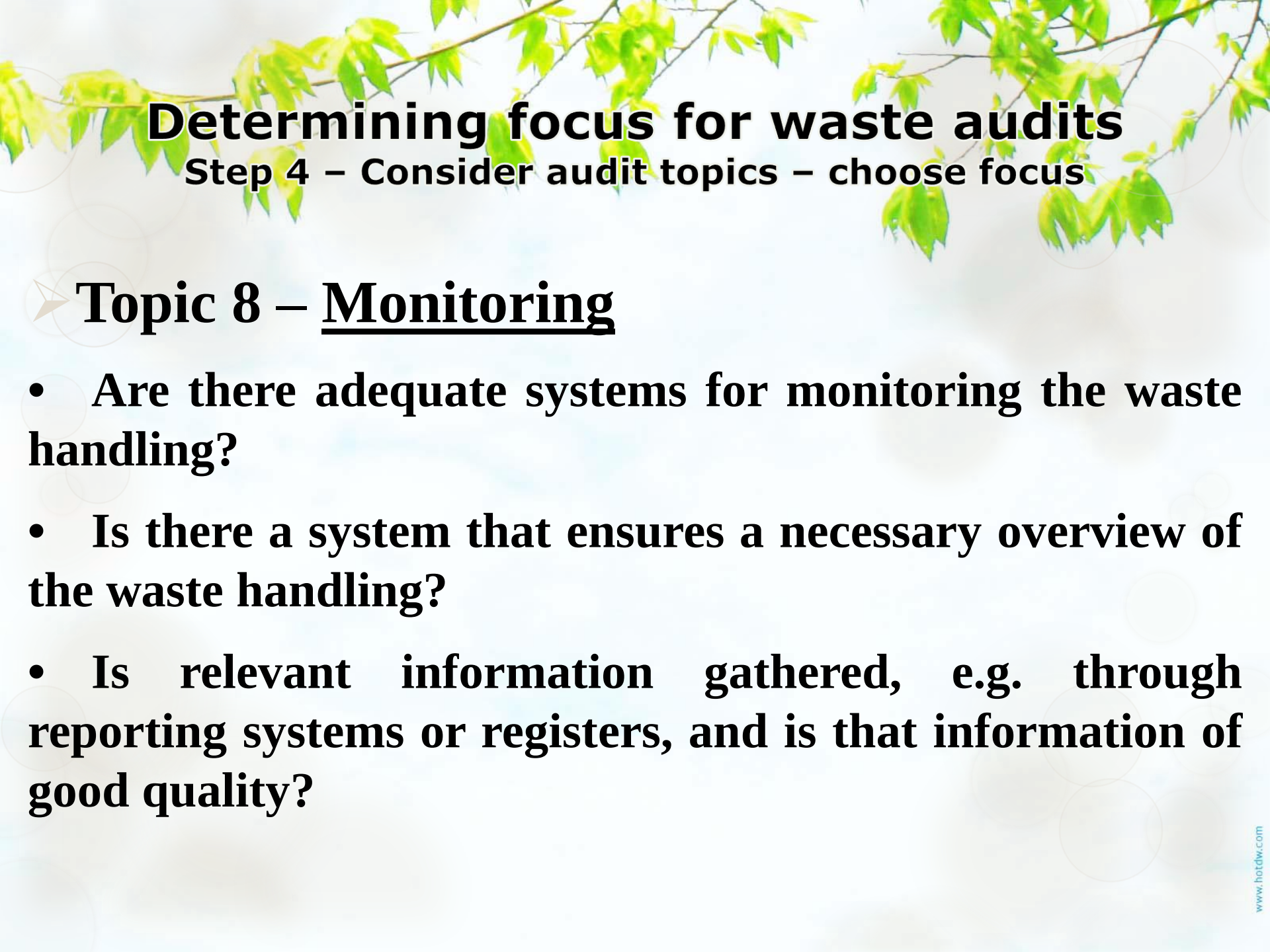


Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

➤ Topic 7 – Compliance with international obligations

- Do the policies, legislation and practices relating to waste management comply with the international obligations and commitments to which the country has agreed?**

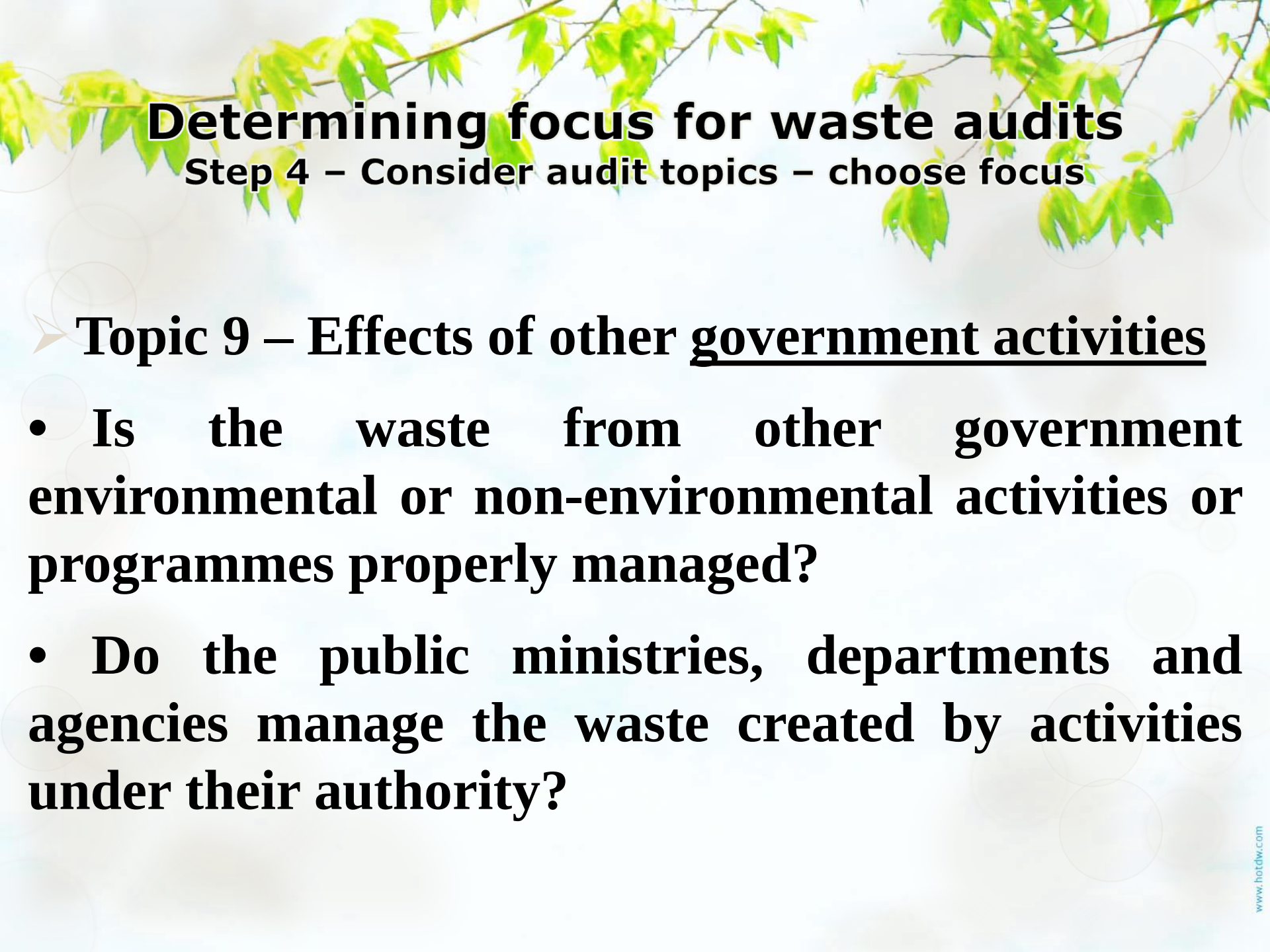


Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

➤ Topic 8 – Monitoring

- Are there adequate systems for monitoring the waste handling?**
- Is there a system that ensures a necessary overview of the waste handling?**
- Is relevant information gathered, e.g. through reporting systems or registers, and is that information of good quality?**

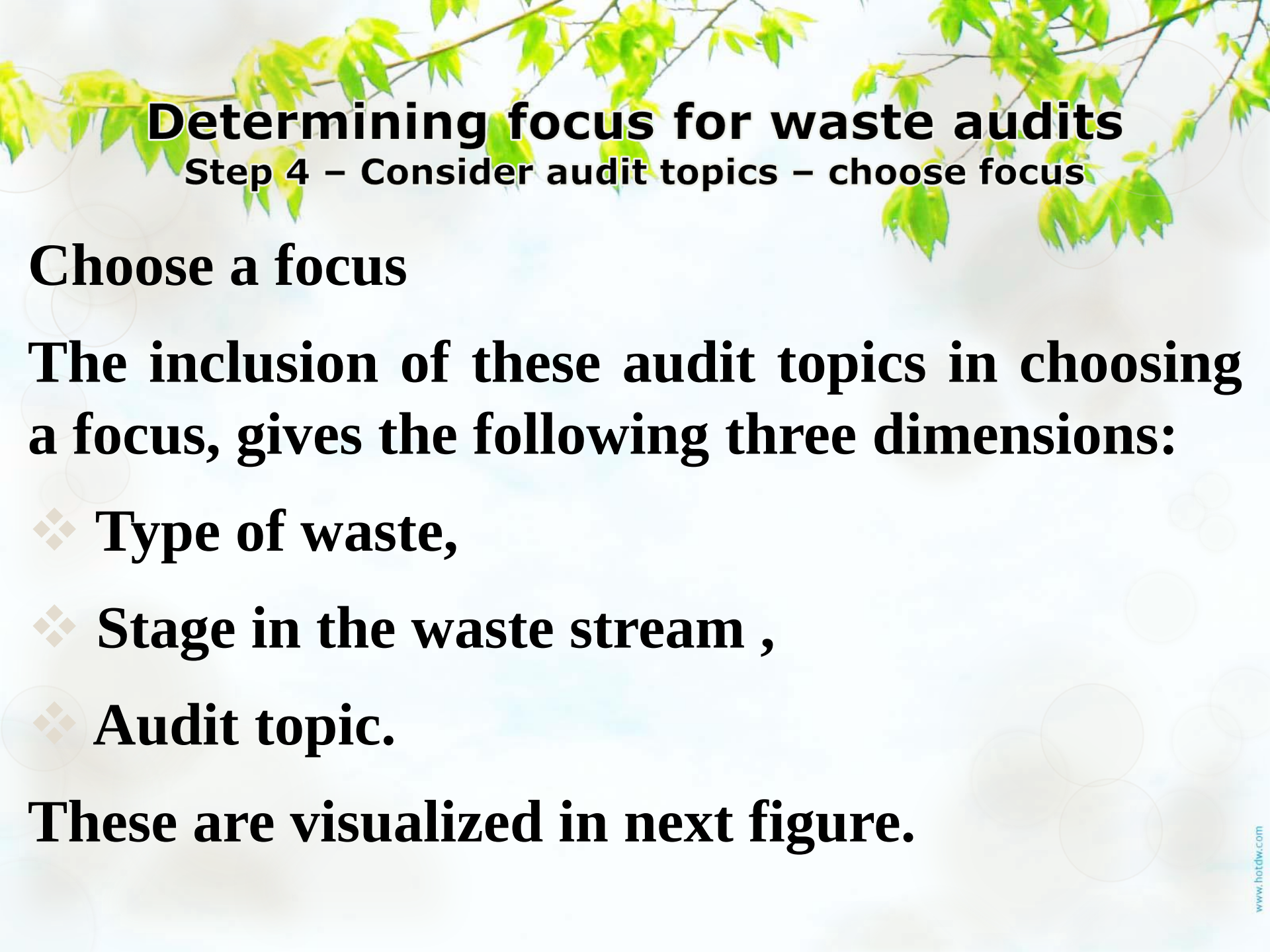


Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

➤ Topic 9 – Effects of other government activities

- Is the waste from other government environmental or non-environmental activities or programmes properly managed?**
- Do the public ministries, departments and agencies manage the waste created by activities under their authority?**



Determining focus for waste audits

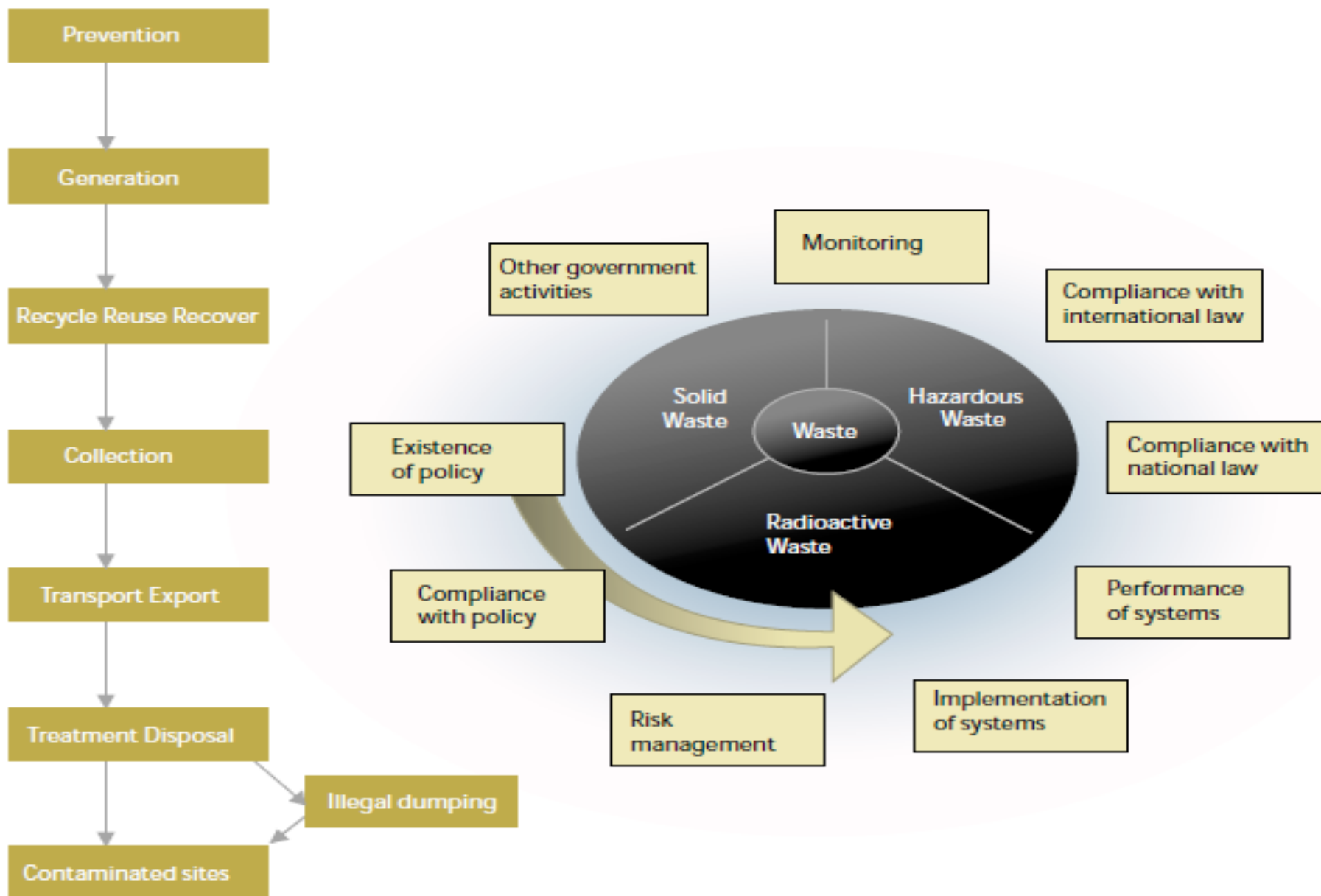
Step 4 – Consider audit topics – choose focus

Choose a focus

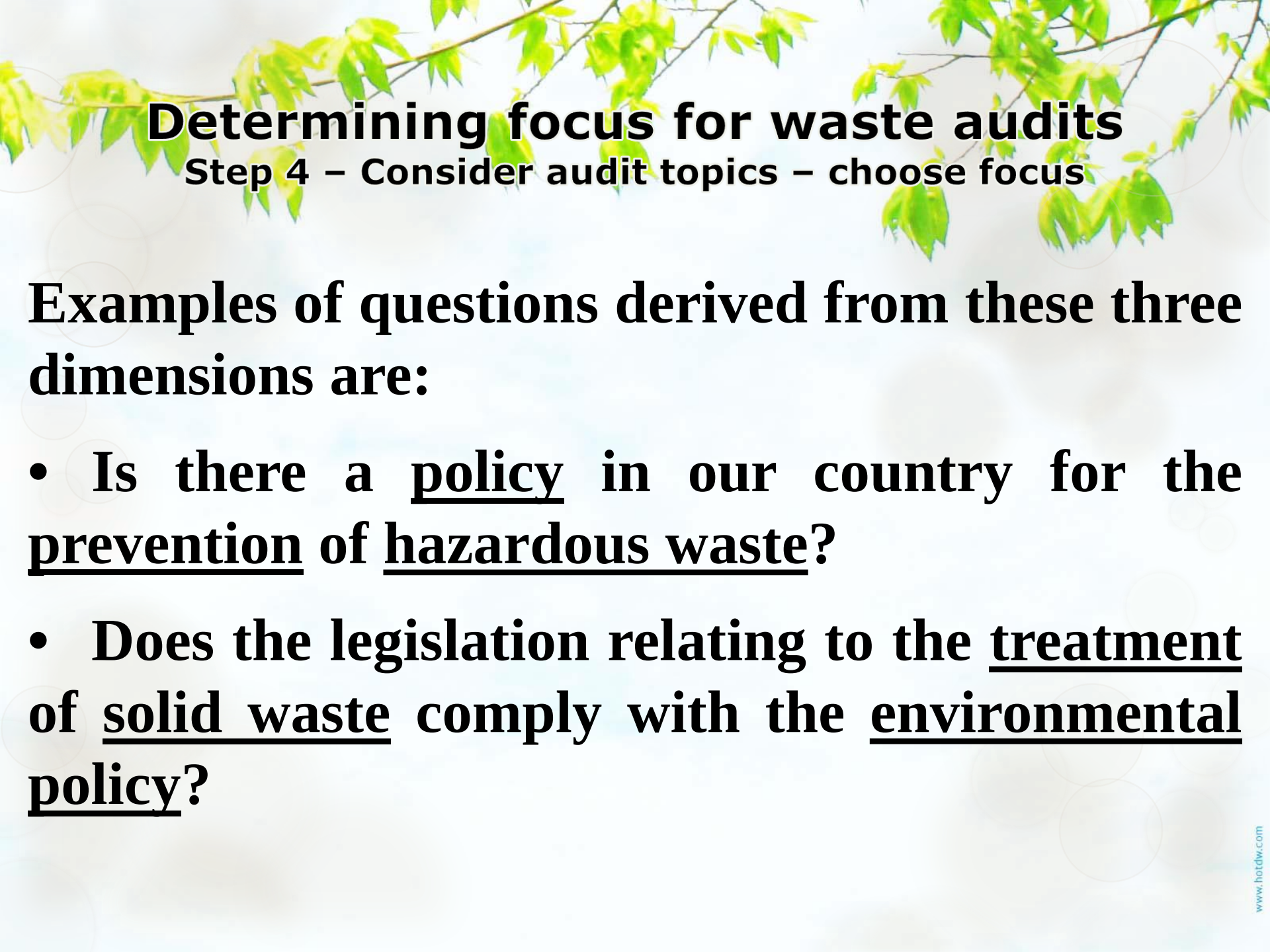
The inclusion of these audit topics in choosing a focus, gives the following three dimensions:

- ❖ **Type of waste,**
- ❖ **Stage in the waste stream ,**
- ❖ **Audit topic.**

These are visualized in next figure.



Graphic depiction of the three dimensions behind an audit focus

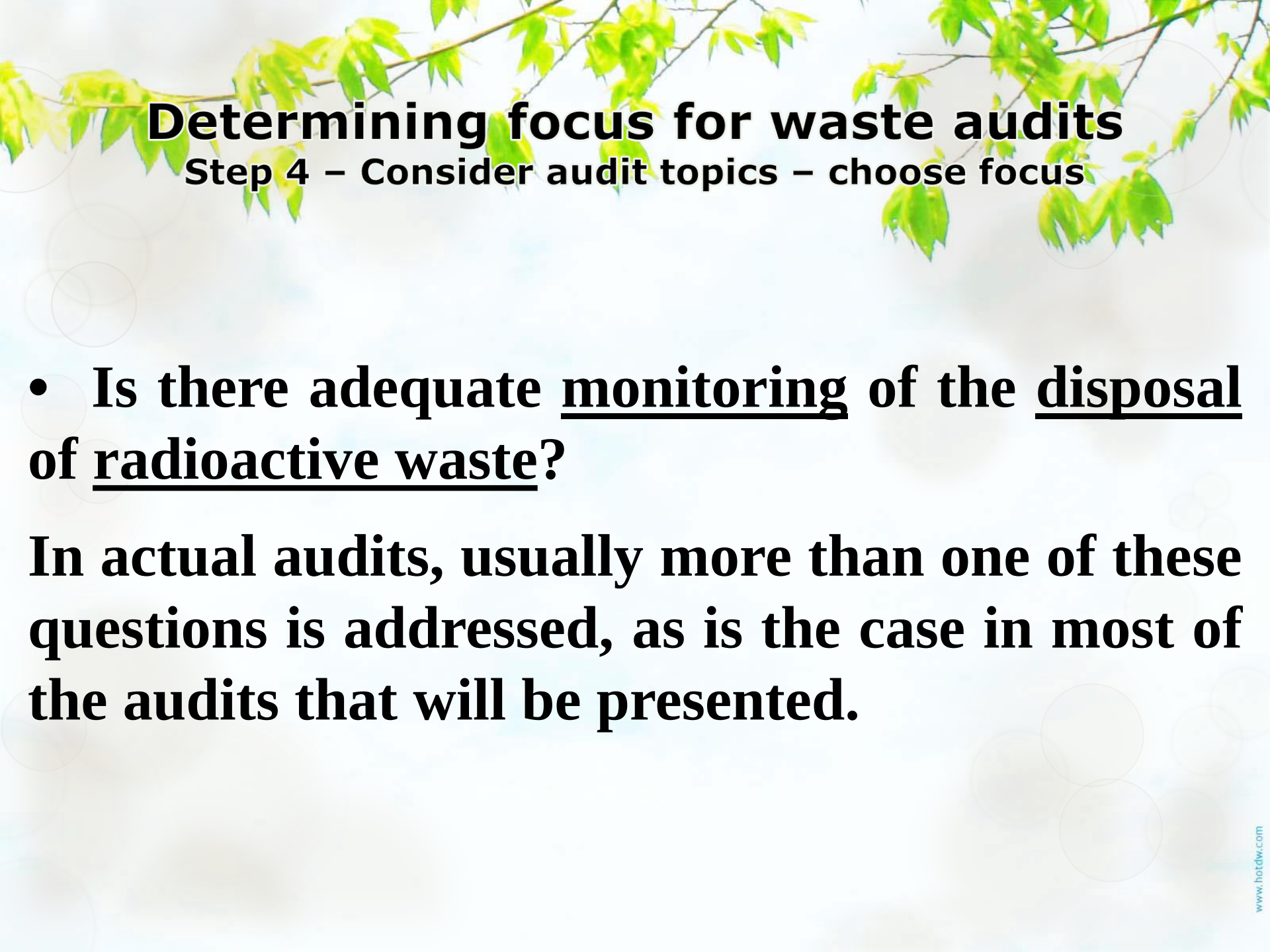


Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

Examples of questions derived from these three dimensions are:

- Is there a policy in our country for the prevention of hazardous waste?**
- Does the legislation relating to the treatment of solid waste comply with the environmental policy?**



Determining focus for waste audits

Step 4 – Consider audit topics – choose focus

- **Is there adequate monitoring of the disposal of radioactive waste?**

In actual audits, usually more than one of these questions is addressed, as is the case in most of the audits that will be presented.

- Related Questions:

- 1- Please name the four-step procedure of determining focus for waste audits. (Introduce your proposed steps if you want.)**
- 2- In which case is the SAI's responsibility to point out descriptions of the problems?**
- 3- What is the role of people to assess the seriousness of the possible damage from waste?**
- 4- Please suggest the roles of SAIs as relevant actors associated with waste management.**
- 5- Using different stages in the waste stream is necessary to cover all the important factors. Please name these stages.**



For Your Attention!