CARBON FOOTPRINT
Malta International Airport

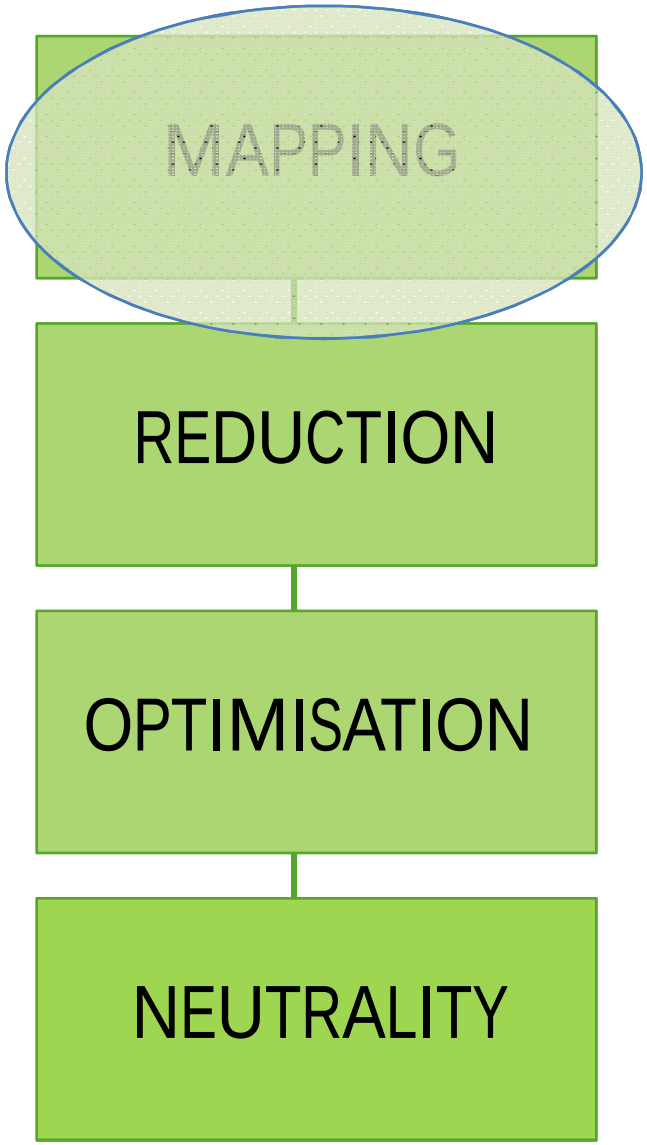
D-AIR is an EU funded project where local governments together with airport operators work on converting airports into ecological and sustainable transport hubs, helping to reduce CO2 emissions. D-AIR is founded in part by Interreg IVC through the European Regional Development Fund (ERDF).

Scope of Assignment

- A base line estimation of the carbon emissions established for the carbon footprint of the MIA, its environs, its activities as well as the ancillary activities related to its operations
- An action plan to render airport operations cleaner and as carbon neutral as possible
- A proposed plan recommending how Maltese citizens and foreigners can be persuaded to make more use of public transport connections to and from the airport rather than use of private transport

Outline of Methodology

- Airport Carbon Accreditation
- Defining the Boundary
- Identification of Stakeholders
- Identification of carbon emitting sources
- Conclusion



airport carbon accreditation

MAPPING | REDUCTION | OPTIMISATION | NEUTRALITY

Recognises and accredits the efforts of airports to manage and reduce their carbon emissions

http://www.airportcarbonaccreditation.org

ACI Europe Accreditation scheme

- 77 European airports accredited, between them account for 58% of Europe's air traffic

Mapping 29 Airports with 12.7% of European passenger traffic	**Reduction** 21 Airports with 12.9% of European passenger traffic	**Optimisation** 13 airports with 27.6% of European passenger traffic	**Neutrality** 14 airports with 5.3% of European passenger traffic
Albania Tirana	**Czech Republic** Prague	**Belgium** Brussels	**Italy** Milan Linate Milan Malpensa
Austria Vienna	**Finland** Enontekiö Airport Ivalo Airport Kemi-Tornio Airport Kittilä Airport Kuusamo Airport Rovaniemi Airport Vantaa	**France** Paris Charles de Gaulle Paris Orly	**Norway** Trondheim Oslo
Croatia Dubrovnik Zagreb	**France** Nice Paris le Bourget	**Germany** Frankfurt Munich	**Sweden** Stockholm-Arlanda Airport Stockholm-Bromma Airport Umea Airport Göteborg Landvetter Airport Malmö Airport Åre Östersund Airport Lulea Airport Ronneby Airport Visby Airport Kiruna Airport
Estonia Tallinn	**Germany** Dusseldorf Hamburg	**Italy** Rome Fiumicino	
France Toulouse Blagnac Lyon	**Greece** Athens	**Netherlands** Amsterdam	
Germany Cologne/Bonn	**Ireland** Cork Dublin Shannon	**Switzerland** Geneva Zurich	
Hungary Budapest	**Italy** Bologna	**Turkey** Antalya	
Italy Rome Ciampino	**Netherlands** Eindhoven	**United Kingdom** London Heathrow Manchester Farnborough	
Poland Warsaw Chopin	**Norway** Kristiansand		
Portugal Faro Flores Horta Lisbon Porto Punto Delgrade Santa Maria			

GHG Protocol

- **Direct emissions** come from sources that are owned or controlled by the reporting entity.
- **Indirect emissions** are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity.

Emission Scopes

Scope 1:
All direct GHG emissions

Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat or steam

Scope 3: Other indirect emissions, such as:

- The extraction, production and transport of purchased materials and fuels
- Transport-related activities in vehicles not owned or controlled by the reporting entity
- Outsourced activities

Malta International Airport (2013)

Over 80% of aircraft movement is accounted by the top eight airlines

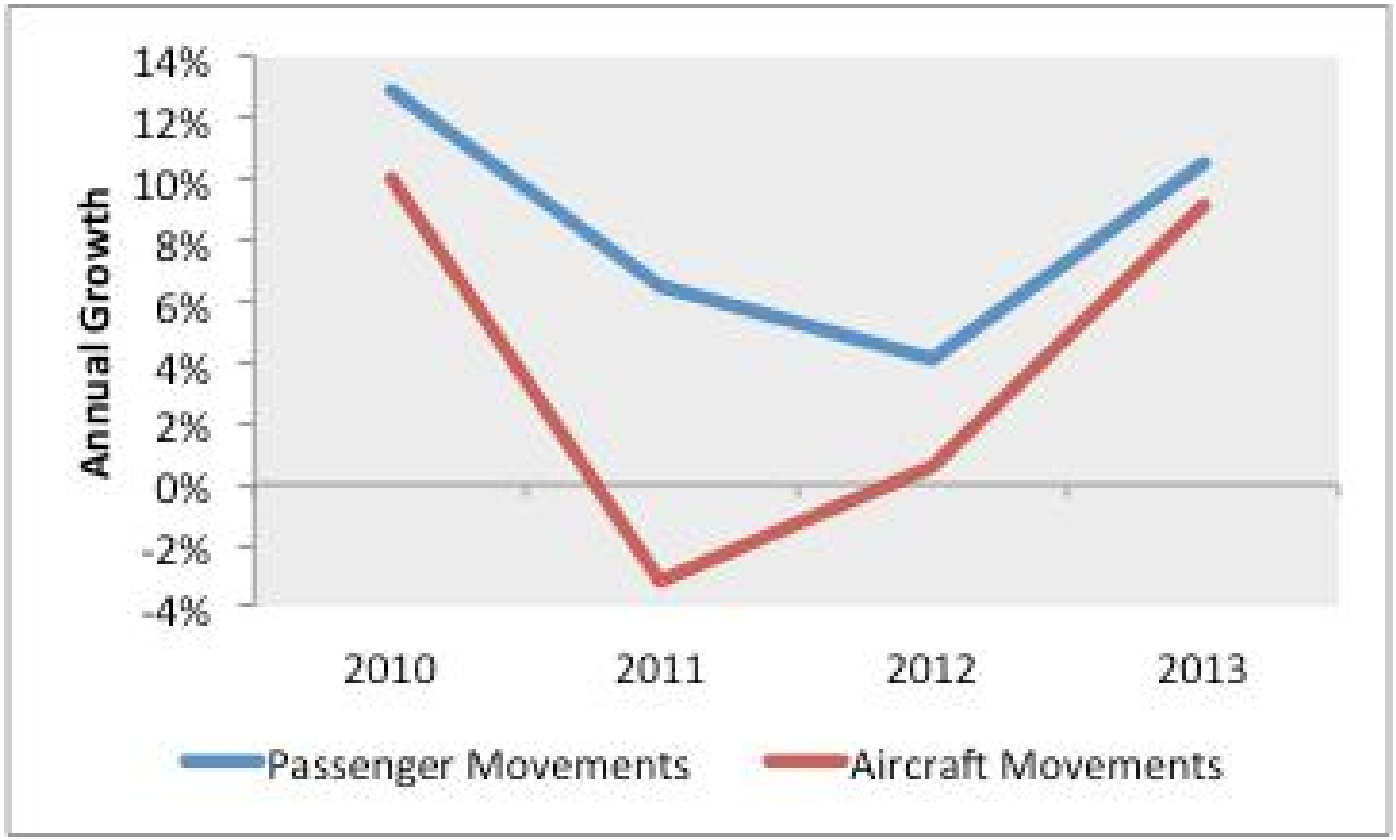
Caters for 40 Airlines

50% - Airmalta
22% Ryan Air

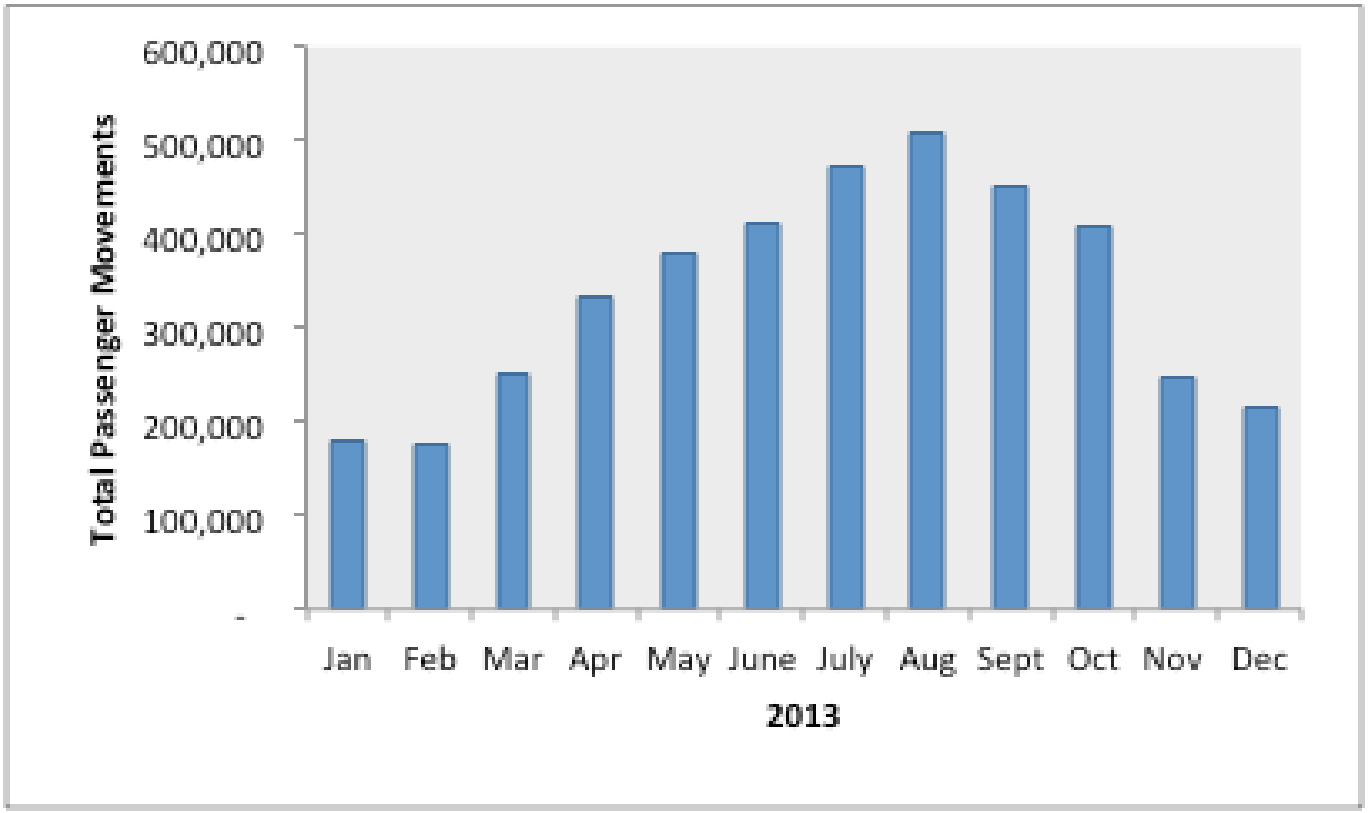
Caters 16 Million kgs of Cargo

4 Million Passenger Movements

Malta International Airport



Malta International Airport

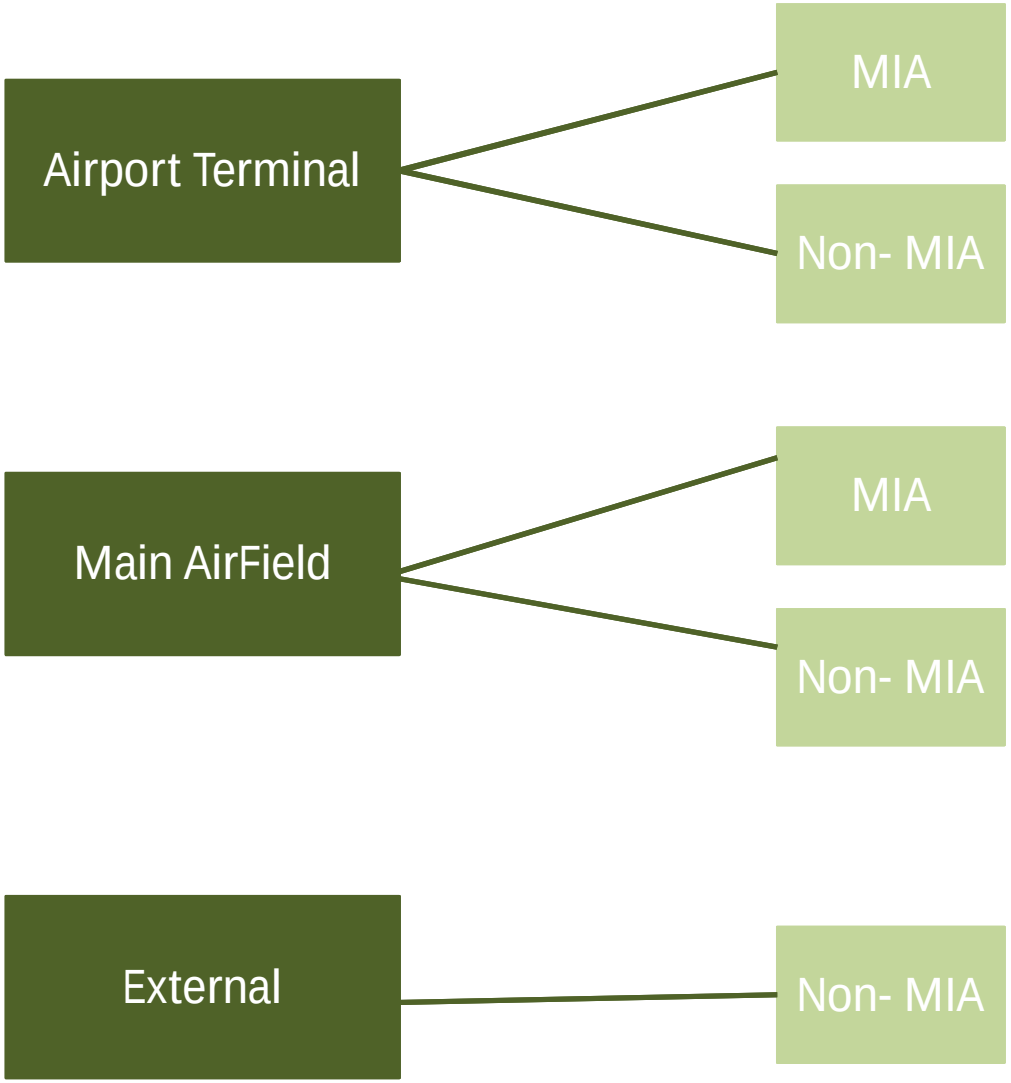


Strong Seasonal Element

Peaks	Passenger Movements	Date
1st	19,663	17-Aug-13
2nd	19,574	18-Aug-13
3rd	19,256	28-Jul-13

IDENTIFICATION OF STAKEHOLDERS

Identification of Stakeholders



Identification of Stakeholders

The Airport Terminal Building

MIA: MIA's own offices at Level 2

Other Tenants: Various retail outlets, catering establishments and offices

The airfield

MIA is responsible for airfield operations related to flights such as the control tower, airfield lighting, security, fire and rescue services, etc.

Other Tenants: Flying Schools, Hangars, Customs, Fuel Supplier, etc.

External

Skyparks and retail

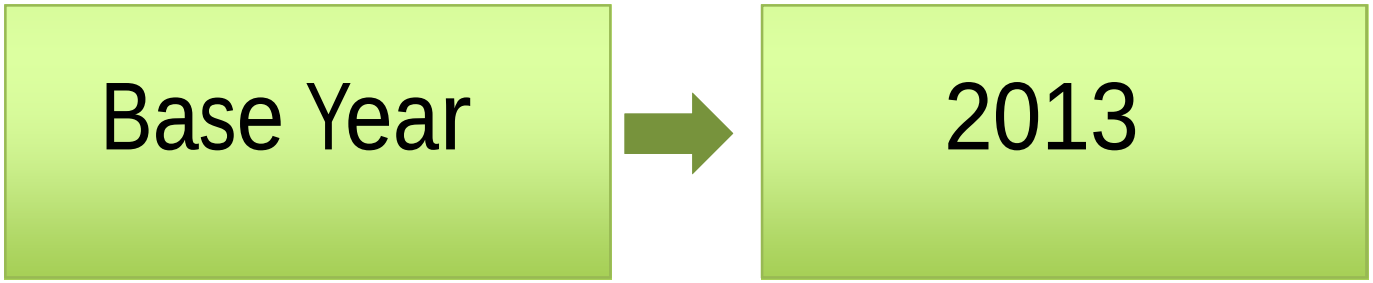
Aircraft Maintenance Firms

Aircraft Catering

CARBON EMITTING ACTIVITY

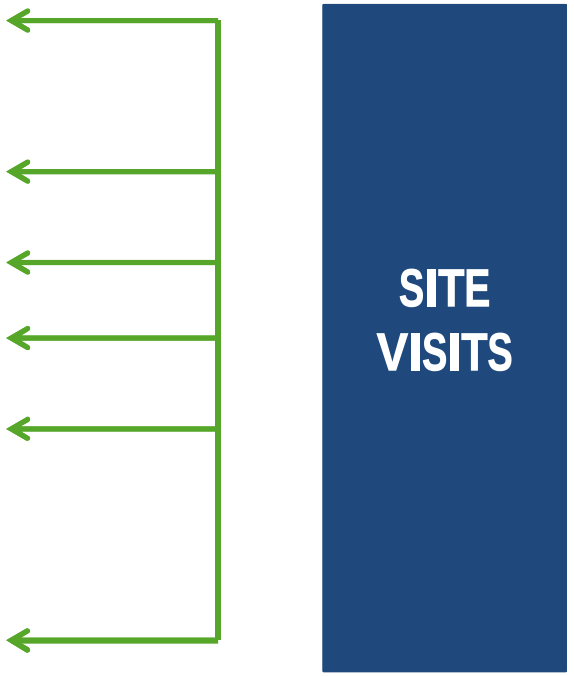
Collection of Data

- Water and Electricity Bills
- Fuel Bills
- Gas
- Number of employees
- Passenger movement
- Aircraft movements
- Frequency of public transport

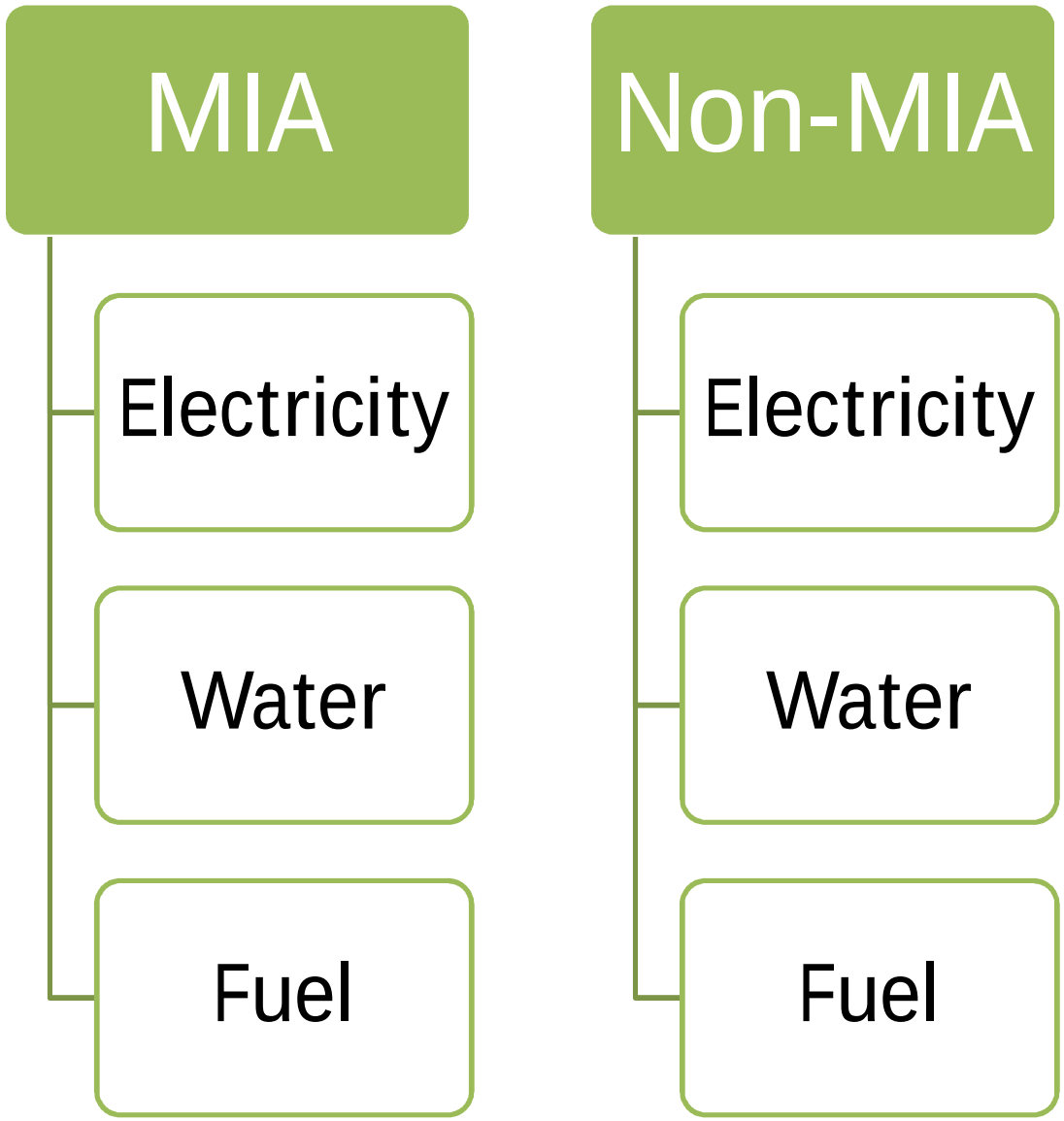


Stakeholder Meetings

- Malta International Airport
- SkyParks
- AirMalta
- Lufthansa Technic Malta
- Medavia
- SR Technics
- Sky Gourmet
- Enemalta
- GlobeGround Malta
- World Aviation Services



Estimation of Emissions



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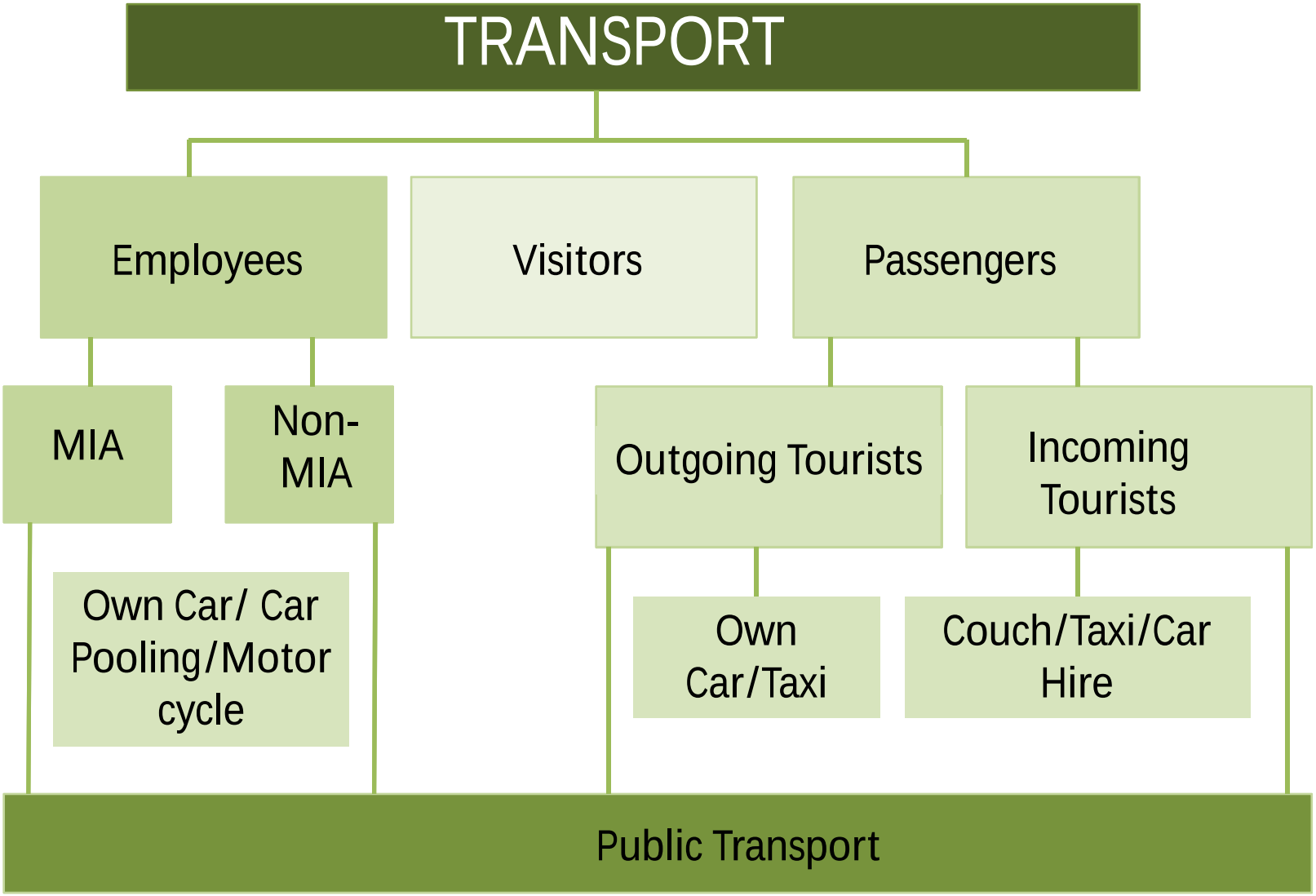

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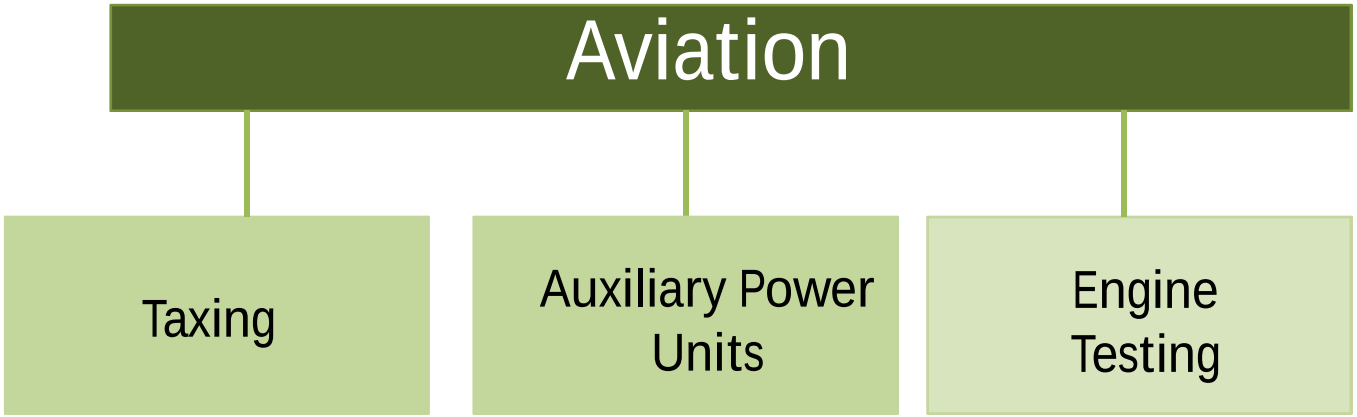

Conclusion

- The methodology allows us to identify the activities which emit the most CO_2e emissions
- Nature of activities allows us to determine whether and to what extent the activities can be addressed to reduce carbon emissions.