# Nitrogen Crisis - Answer Sheet

#### **Stakeholders**

- Farmers (or BBB, Farmers Defence Force)
- Politicians (or ministry of Agriculture, ministry of the Interior, left-wing, right-wing)
- Scientists (or RIVM, Commissie Remkes)
- Industry sector
- Transport sector
- Construction workers (or FNV)
- Daily commuters
- Citizens
- Environmentalists (or Greenpeace, Urgenda, Natuur en Milieu organisations)
- Raad van State

Sources of nitrogen pollution		
Primary sources	Secondary sources	
- Agriculture (NH3)	- High demand for dairy & meat	
- Industry (NOX)	- Nitrogen from other countries	
- Households (NOX)	- Not living near the workplace	
- Transport (NOX)		
- Construction work (NOX)		

## **Environmental & health consequences**

- Soil acidification
- Loss of biodiversity
- Damages the ozone layer
- Decrease of water quality (dead zones)
- Smog, bad for the lungs
- Speeds up global warming

#### Possible solutions

### Agriculture

- Less proteins in the food of the cows
- Divide urine and manure
- Add water to the manure
- Air fresheners in the stalls
- Less fertilizer

### Transport

- More electric vehicles
- More public transport / bikes
- Lower speed limit
- Decrease import & export

#### Nature

- More trees and plants

## Industry

- Hydrogen as an energy carrier
- Decrease industry

# Citizens

- Less consumption of meat Cut down on energy use Live closer to the workplace

Countermeasures and policies that already have been undertaken by the Dutch government		Consequences of those policies
-Assigning nitrogen space: a maximum amount of nitrogen that a farm or company can emit	<b>→</b>	Emissions trading between companies and industries / Cutting in the 'space' of agricultural sector to make 'space' for construction work
- PAS	$\rightarrow$	Scandal because it was based on the assumption of reducing nitrogen in the future. The PAS got cancelled and all construction work was put on hold.
-Reducing speed limit from 130km to 100km in order to reduce the amount of nitrogen emitted from cars and traffic.	$\rightarrow$	Reduces only a small amount of nitrogen. Resistance from the citizens.
- Buy out farms near Natura 2000 areas - Subsidize changes to the stalls - New rules for the amount of protein in the food of cattle	$\begin{array}{c} \rightarrow \\ \rightarrow \\ \rightarrow \\ \rightarrow \end{array}$	Angry farmers because they are getting sick of all the regulations and amount of money that they have to pay themselves. Farms are becoming hightech' companies, more stall fires due to the increasing amount of electricity in the stalls.
- Subsidize electric vehicles		Costs a lot of money, but generally agreed upon as a good solution. The demand for green energy is becoming higher.