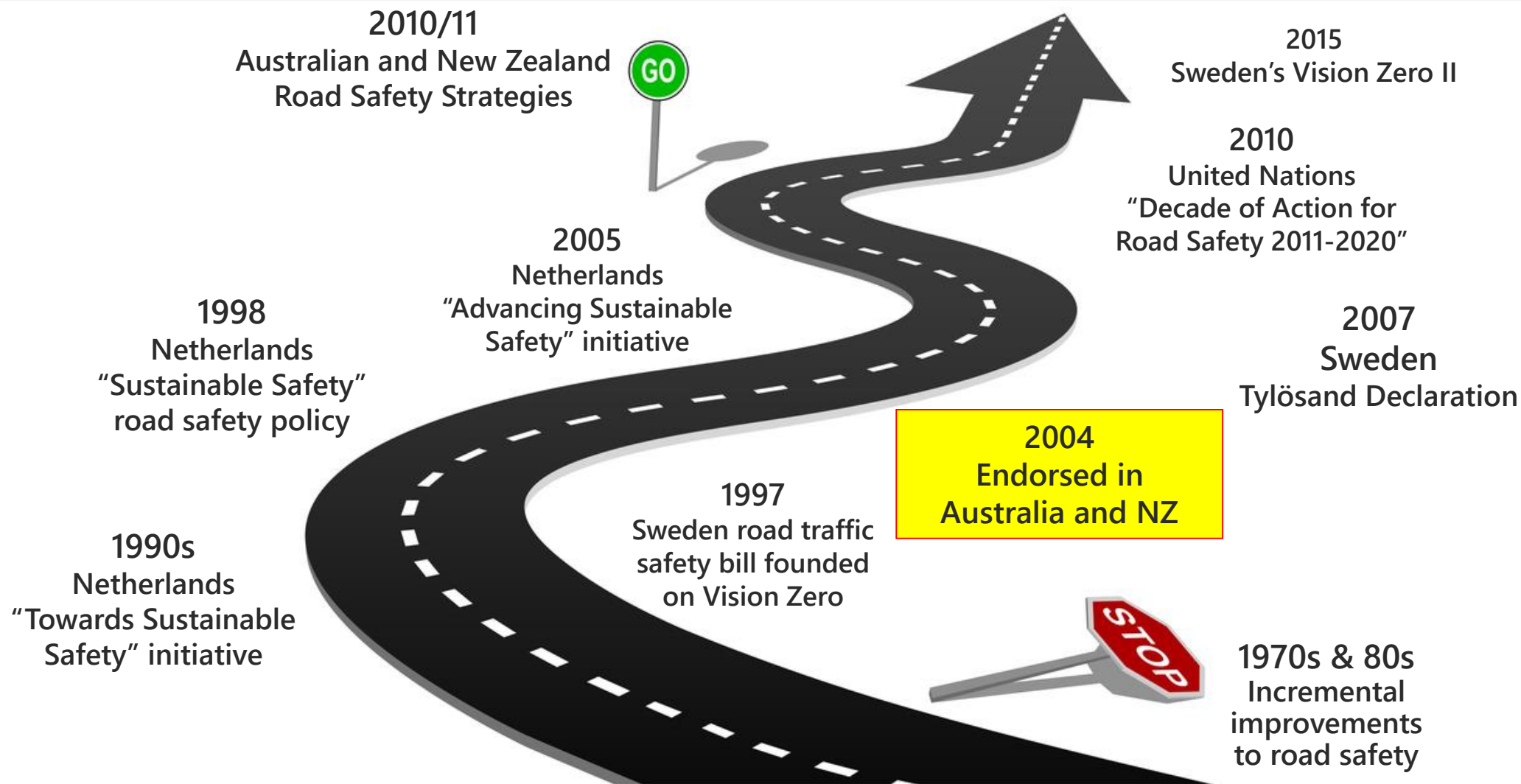




Evolution of the Safe System



Safe System Evolution



Brasilia Declaration on Road Safety 2015



2nd Global High-Level Conference, Brasilia

“At the close of the Conference, the 2200 delegates adopted the ‘Brasilia Declaration on Road Safety’ through which they agreed ways to [halve road traffic deaths by the end of this decade](#) – a key milestone within the new Sustainable Development Goal (SDG) target 3.6.”



Sweden - Tylösand Declaration

2007 Tylösand Road Safety Summit in Halmstad, Sweden

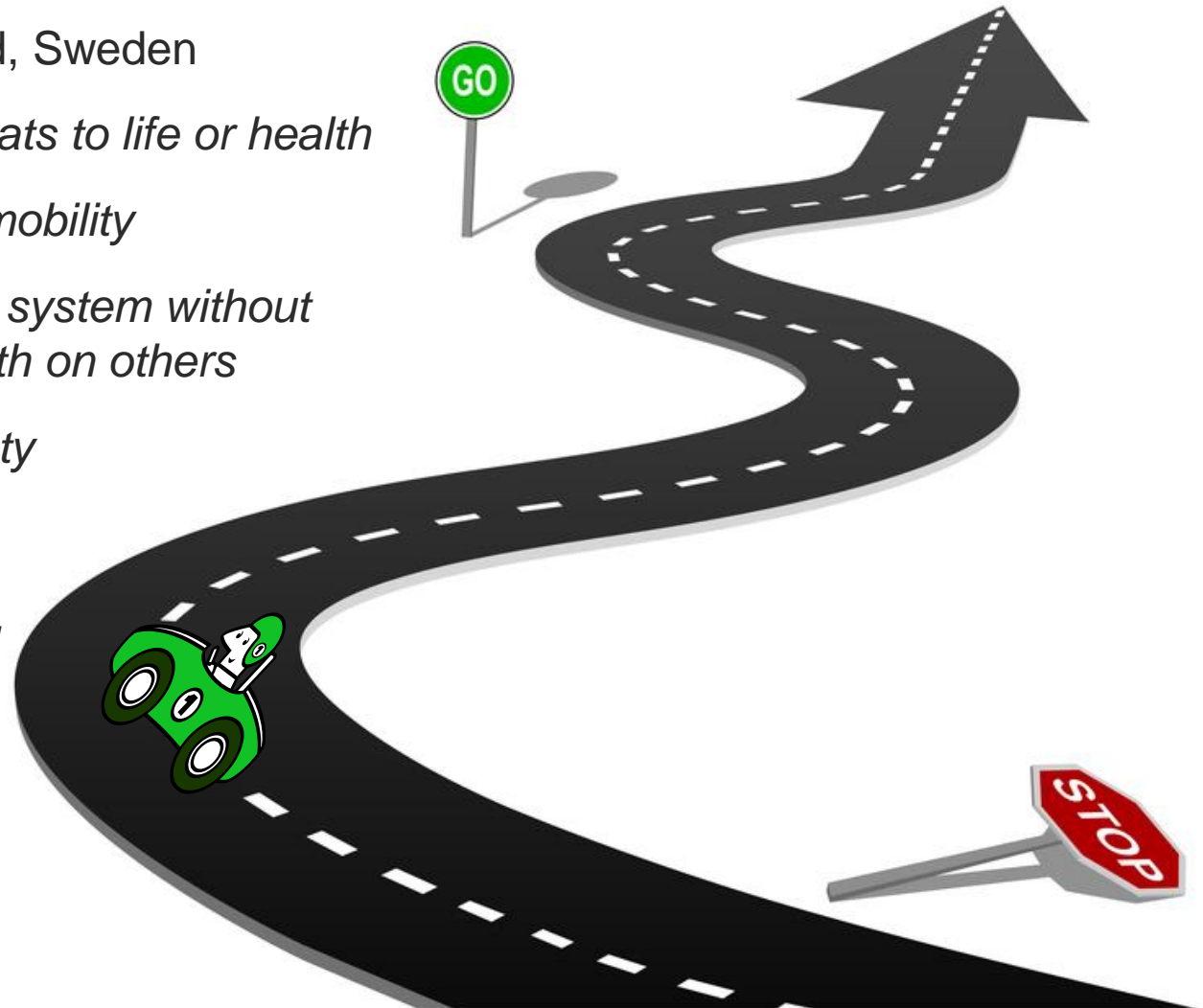
Everyone has the right to use roads without threats to life or health

Everyone has the right to safe and sustainable mobility

Everyone has the right to use the road transport system without unintentionally imposing the threat to life or health on others

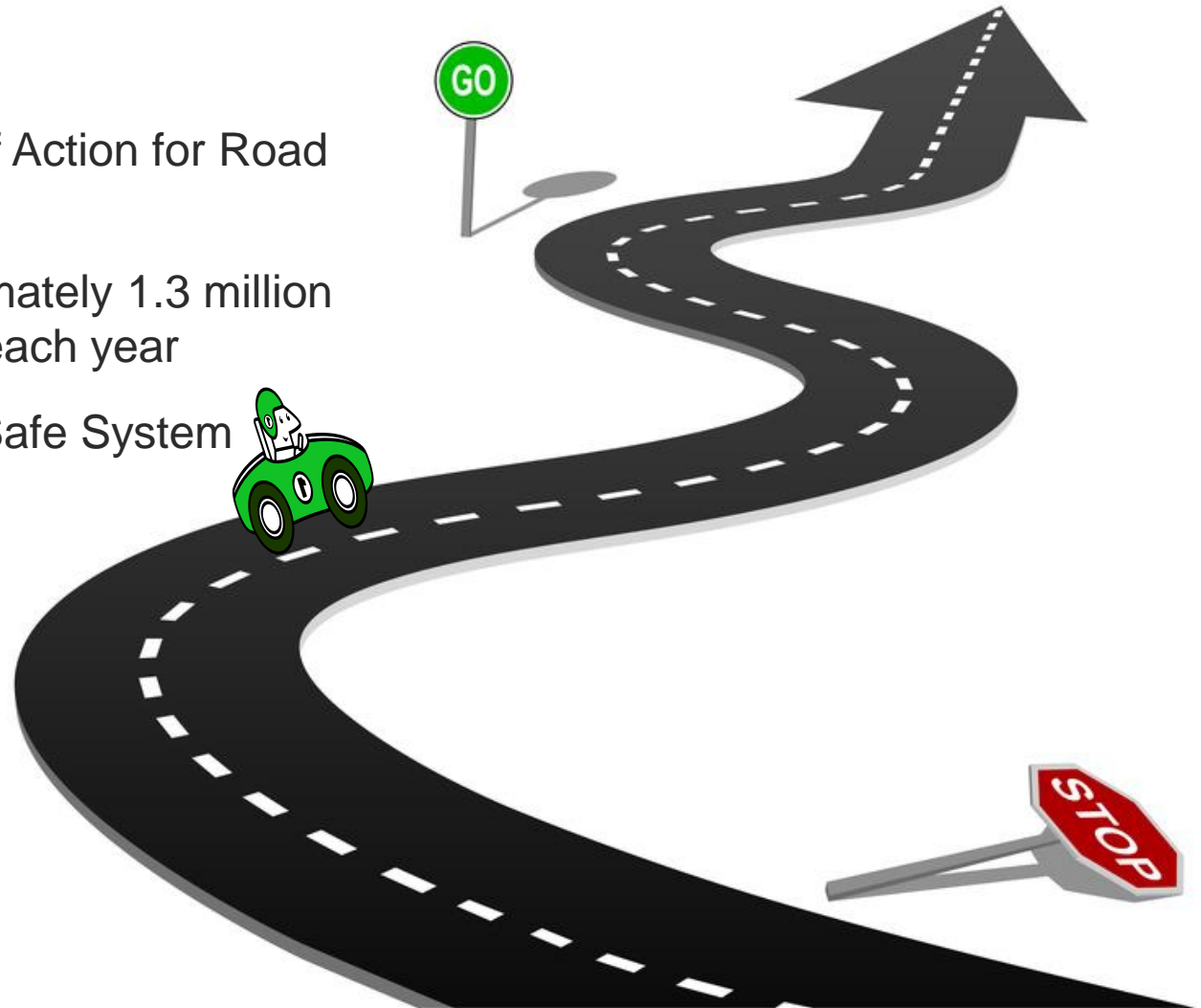
Everyone has the right to information about safety problems and the level of safety of the road transport system

Everyone has the right to expect systematic and continuous improvement in safety



United Nations - Decade of Action

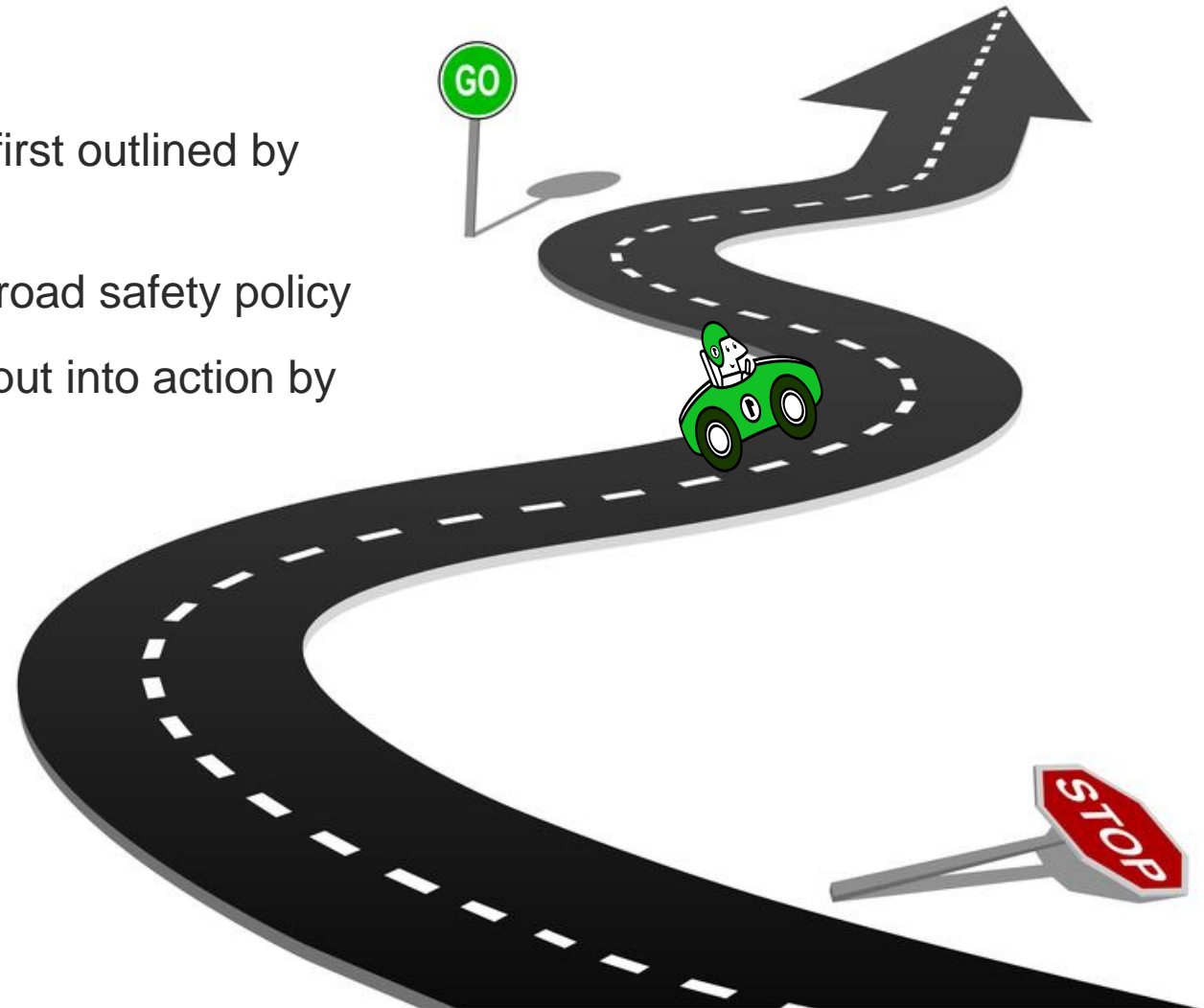
- 2010: United Nations launches the Decade of Action for Road Safety 2011 – 2020
- Aims to address the **global crisis** of approximately 1.3 million road fatalities and 50 million serious injuries each year
- Provides a guiding framework based on the Safe System principles
- [note the post crash pillar as well]



Netherlands - Sustainable Safety



- 1990s: *Towards Sustainable Safety* initiative first outlined by SWOV Institute for Road Safety Research
- 1991: Introduction of Sustainable Safety into road safety policy
- 1998: First phase of Sustainable Safety was put into action by the Dutch Government
- 2005: *Advancing Sustainable Safety* initiative introduced by SWOV as follow-up to *Towards Sustainable Safety*

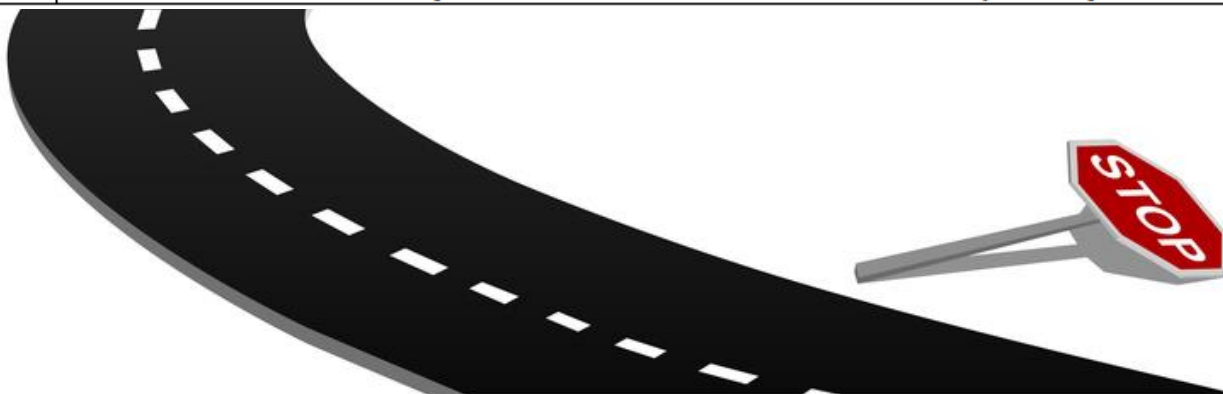


Netherlands - Sustainable Safety



Sustainable Safety Principles

Sustainable safety principle	Description
Functionality of roads	Mono-functionality of roads, as either through-roads, distributor roads, access roads, in a hierarchically structures road network
Homogeneity of masses and/or speed and direction	Equality in speed, direction and masses at medium and high speeds
Predictability of road course and road user behaviour by recognizable road design	Road environment and road user behaviour that support road user expectations via consistency and continuity in road design
Forgivingness of the environment and of road users	Injury limitation through a forgiving road environment and anticipation of road user behaviour
State awareness by the road user	Ability to assess one's own task capability

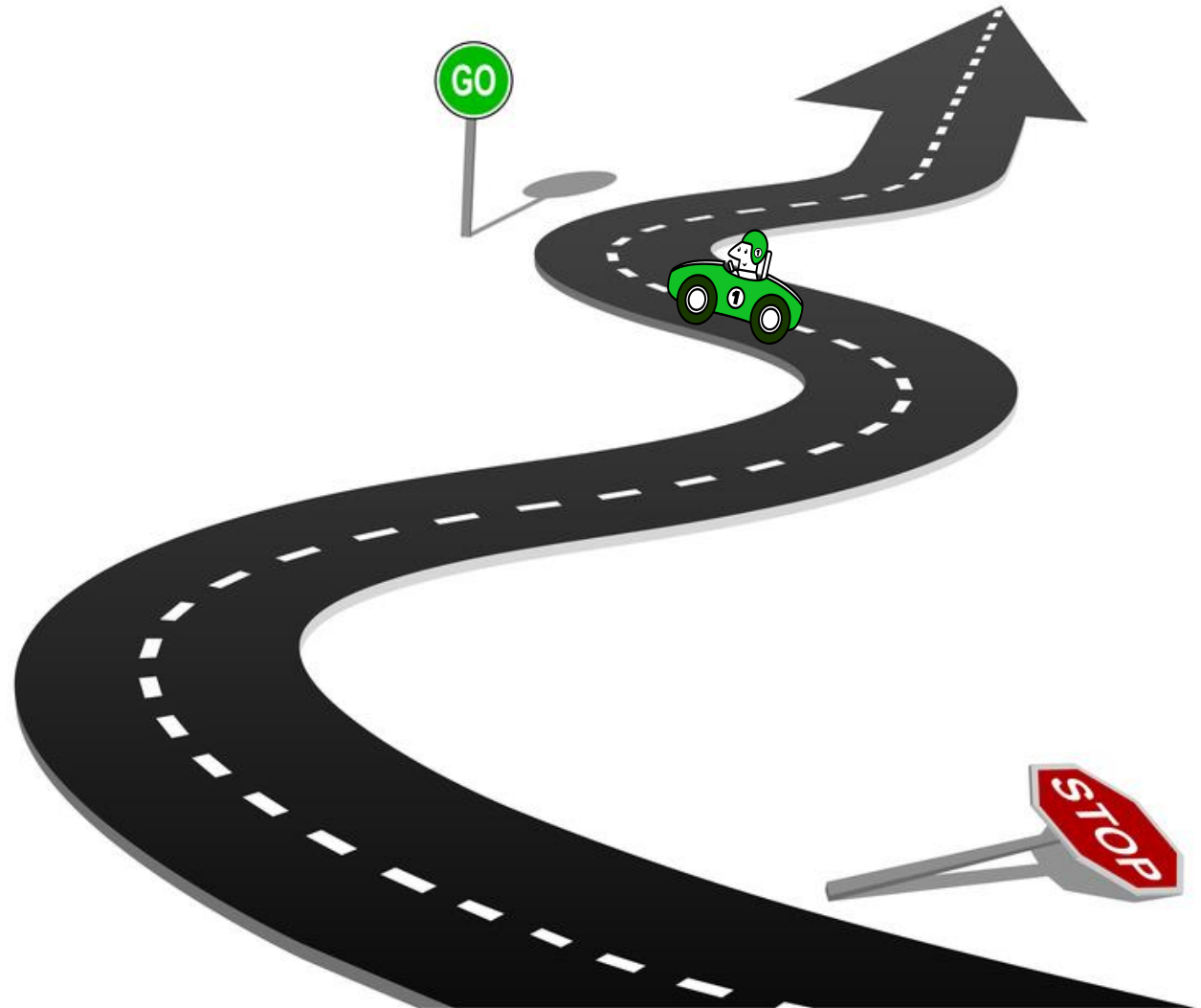


Netherlands – Advancing Sustainable Safety



The updated vision:

- Promotes continuing the successful infrastructural measures of the past;
- Puts more emphasis on education, regulations, and enforcement;
- Emphasizes technological developments;
- Argues the necessity of a system for quality assurance;
- Argues the necessity of an integrated approach to measures, safety principles, and policy areas;
- Points out the importance of integration of road safety with other policy areas, innovation of policy implementation, research and development, and of knowledge dissemination

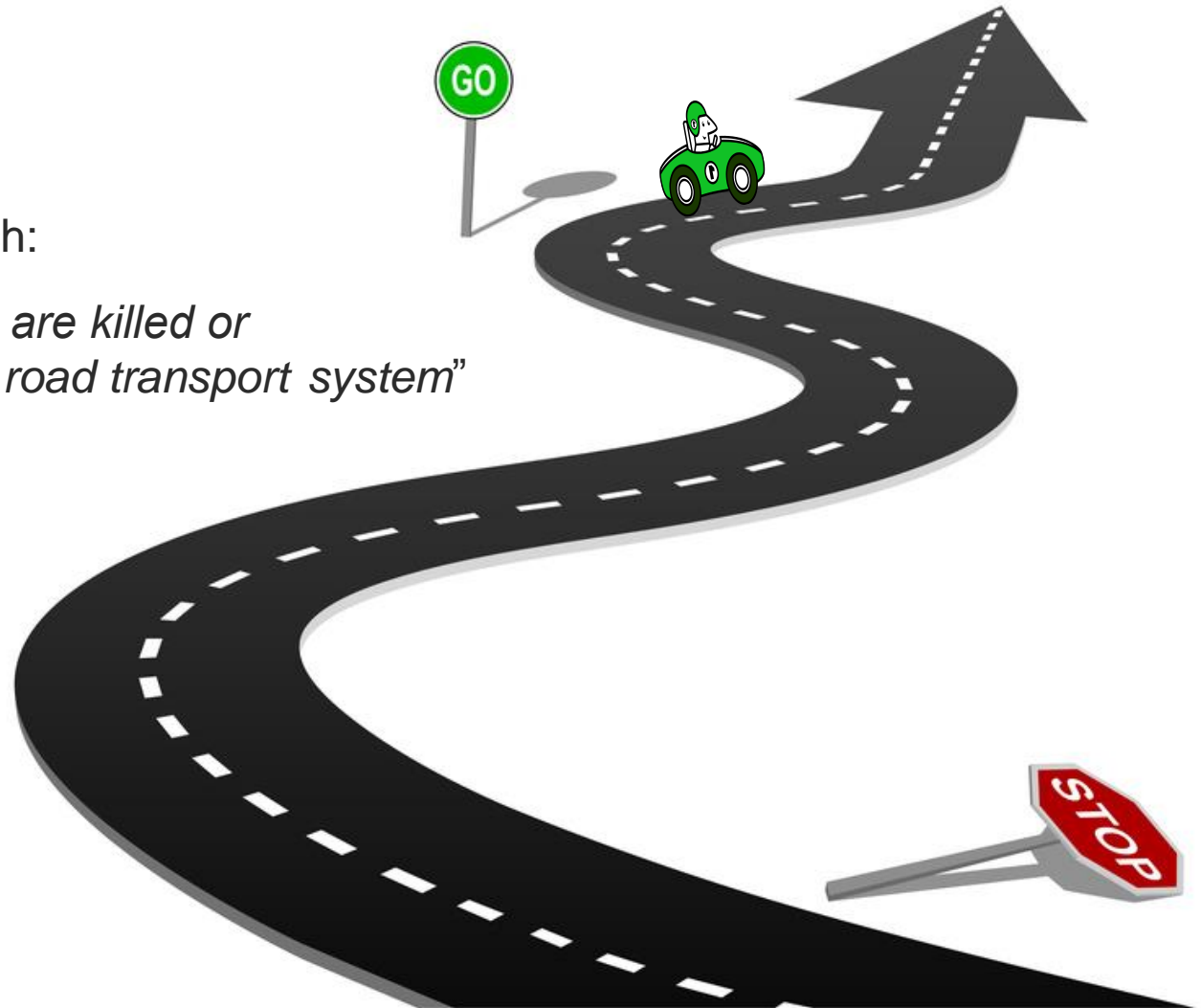


Sweden - Vision Zero

- 1997: Sweden implements *Vision Zero*
- Mandates the response to road safety in which:

“It can never be acceptable that people are killed or seriously injured when moving with the road transport system”

- Based heavily on a ground-up approach
- Next Phase Vision Zero II



Vision Zero II – Broadening the influence



<http://www.visionzeroinitiative.com/>

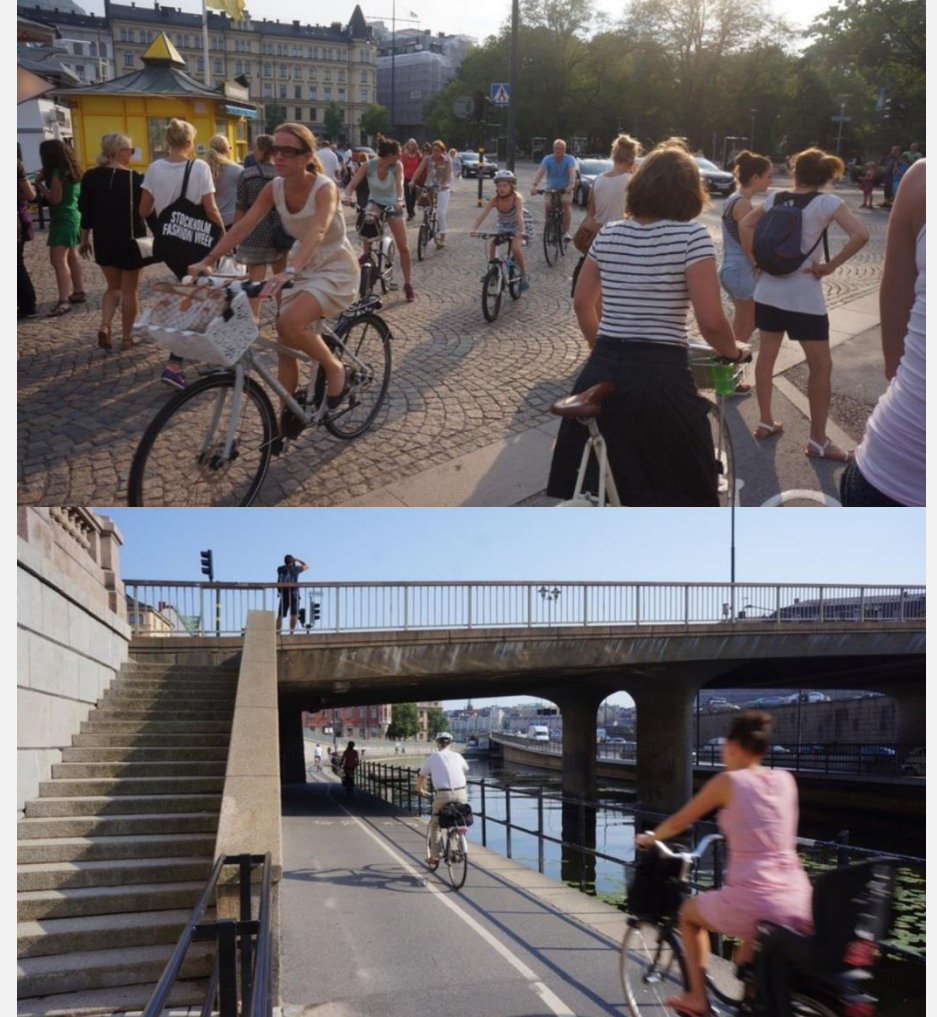
Some of the Safe System Emphasis:

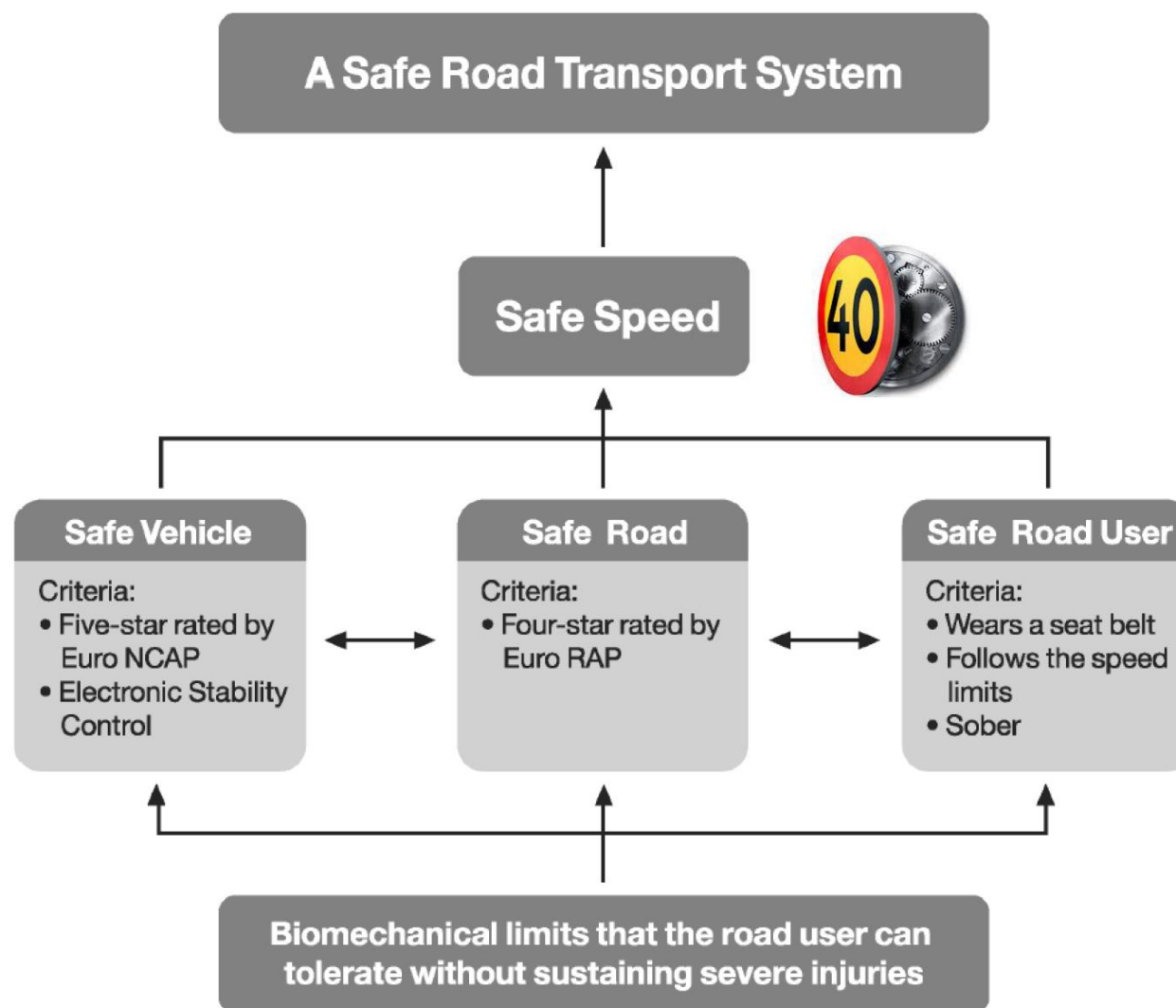
- Safety in information and traffic systems
- Providing safety through education and planning
- Making mobility safe from the start
- Taking safety to new levels
- Making errors part of the equation
- The freedom to move
- One million lives at stake

Vision Zero II

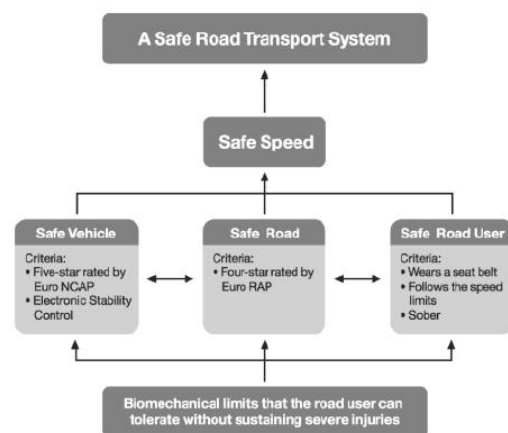
Vision Zero 2.0 in Stockholm, Sweden

- Progression towards a vibrant, walkable city with zero pedestrian and cyclists fatalities or serious injuries
- Reduction on motor vehicle dependence through initiatives to promote walking and cycling
- Congestion pricing and car-free zones in the city centre
- Emphasis on being a walkable city with many streets for dedicated pedestrian and cyclist use
- Extensive network of protected bicycle lanes
- Previous social opposition has now turned in favour of developments (e.g. road closures, congestion charges)





Safety Performance Indicators



Indicator	Starting point	2014	Target for 2020	Trend
Number of road traffic fatalities	440	270	220	In line with the required trend
Number of seriously injured	5 400	4 900	4 000	Not in line with the required trend
Share of traffic volume within speed limits, national road network	43 %	46 %	80 %	Not in line with the required trend
Share of traffic volume within speed limits, municipal road network	64 %	63 %	80 %	Not in line with the required trend
Share of traffic volume with sober drivers	99,71 %	99,78 %	99,90 %	Not in line with the required trend
Share of front seat passenger car occupants wearing a seat belt	96 %	97 %	99 %	In line with the required trend
Share of cyclists wearing a helmet	27 %	37 %	70 %	Not in line with the required trend
Share of moped riders using a helmet correctly	96 %	96 %	99 %	Not in line with the required trend
Share of new passenger cars with the highest Euro NCAP score	20 %	57 %	80 %	In line with the required trend
Share of safe motorcycles (ABS)	9 %	39 %	70 %	In line with the required trend
Share of traffic volume on roads with speed limit above 80 km/h and median barriers	50 %	73 %	75 %	In line with the required trend
Share of safe pedestrian, cycle and moped crossings on main municipal road networks	19 %	25 %	Not defined	Cannot be assessed
Share of municipalities with good-quality maintenance of pedestrian and cycle paths	15 %	No measurement in 2014	70 %	Starting year for the measurement in 2013, no measurement in 2014 – cannot be assessed



Austroads



Austroads

Acknowledgement of the Safe System approach



Regarded as the best practice approach to road safety

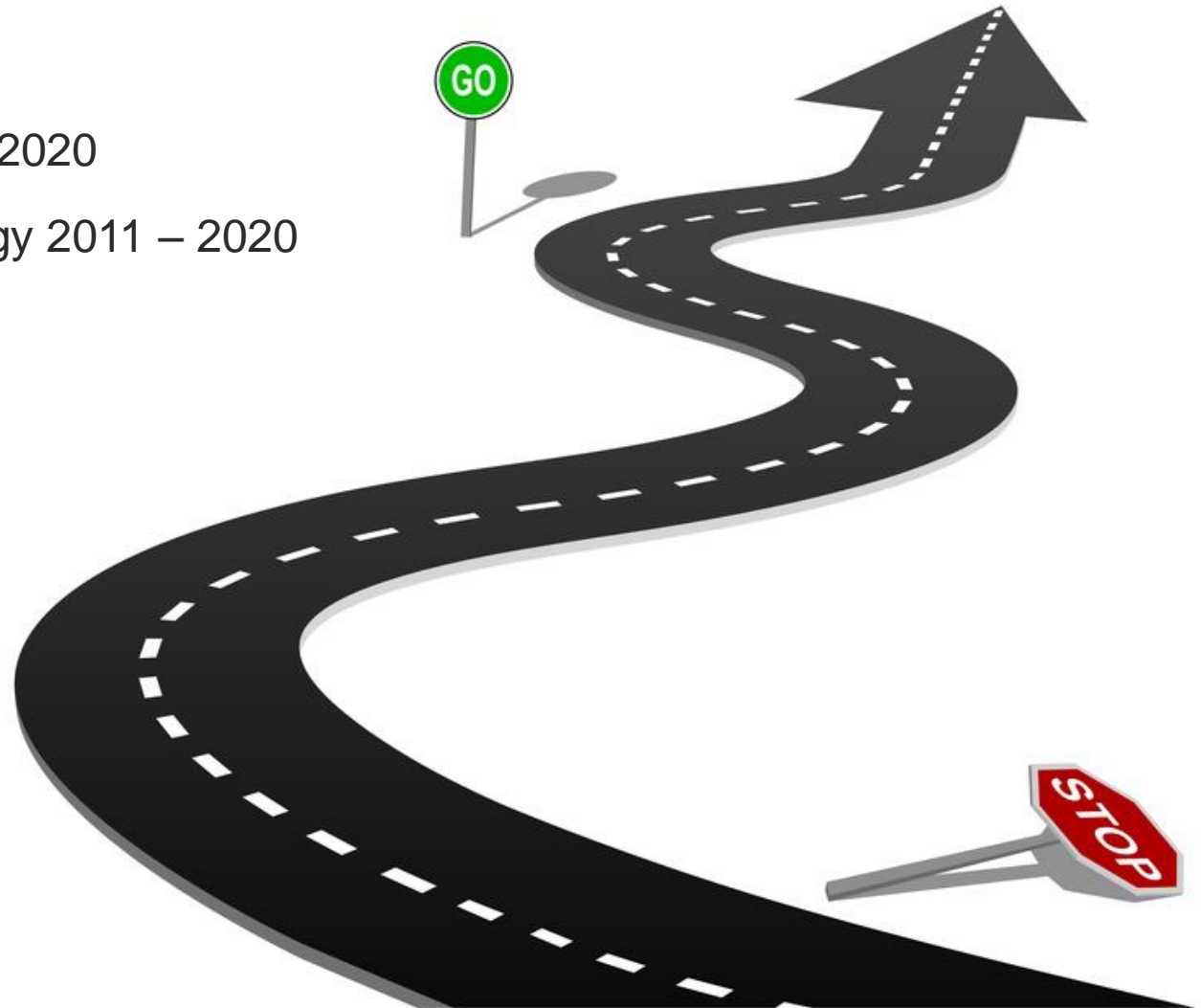
- Adopted by several international organisations, including:
 - Organisation for Economic Co-operation and Development (OECD)
 - United Nations
 - Permanent International Association of Road Congresses (PIARC) – now known as the World Road Association

Australia and New Zealand



- 2010: New Zealand's Safer Journeys 2010 – 2020
- 2011: Australian National Road Safety Strategy 2011 – 2020
- Road safety strategies in each jurisdiction

2004
Endorsed in Australia and
New Zealand



Australia and NZ can also lead with innovation



New South Wales - Newell Highway



Queensland – Bruce Highway



New Zealand – Waikato Expy



VR

Source: DPTI

Thank you

Australian Automobile Association. (2013). "Star rating Australia's national network of highways." Canberra, Australia.

Carlsson, A. (2009). "Evaluation of 2+1 roads with cable barriers: final report." Swedish National Road and Transport Research Institute, Sweden.

European Road Safety Assessment Programme. (2011). "European road safety atlas final report." EuroRAP, Brussels, Belgium.

Wegman, F., Aarts, L., and Bax, C. (2006). "Advancing sustainable safety: National road safety outlook for 2005–2020." 0925-7535, SWOV Institute for Road Safety Research, Leidschendam, The Netherlands.