Analysis of current (climate related) games

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BBC Climate Challenge

http://www.bbc.co.uk/sn/hottopics/climatechange/climate_challenge/

Goal:
"Tackle climate change and stay popular enough with the voters to remain in office."

Game mechanics:
- Turn-based, 10 rounds of 10 years (total: 100 years)
- Influencing parameters by making decisions
    - Resources: money, power, food, water
    - Environment: CO2
- Periodical world leader meetings
- Events
    - Random: Natural disasters
    - Based on decisions: Food shortages, power shortages etc.

Notes:
- Influence of world tops on local environment/choices not clear
- Too much focus on resource management

Version 646, 08/11/06 13:57

CLIMATE CHALLENGE

Red Redemption

WELCOME TO CLIMATE CHALLENGE!

The future is in your hands! You are president of the European Nations and must tackle global climate change from 2000 to 2100.

You choose Europe's policies and try to persuade competing regional blocs to reduce their carbon emissions.

Press the green play button to advance one, 10-year turn in the game.

Click OK to continue in tutorial mode, or skip the tutorial to start immediately.

OK   SKIP TUTORIAL

?   ▶

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CHOOSE YOUR PLAYER CHARACTER

?

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Privatise electricity

Privatise the electricity industry. The government will no longer operate the power infrastructure.

Public Opinion

"Companies only care about profits. Our bills will go up."

"This makes good economic sense. Private companies can run things much more efficiently than government."

Grants access to 'Privatise water' and 'Privatise rail'.

ENVIRONMENT
= CO2 drop next turn

1990

NATIONAL POLICIES ✕

NATIONAL

Plant small forests

Introduce new fuel tax

Privatise electricity

Promote industrial energy efficiency

Subsidise aviation

APPROVAL

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Vol 145 No 21
January 1st, 2000

THE CLIMATE TIMES

Richardson backs aviation subsidy

The government should make air travel less expensive for business commuters, president Richardson said in a speech yesterday.

"I'm convinced that subsidised flights for business travellers will boost Europe's economy," Richardson said. "We must make Europe an attractive place for investors in an increasingly competitive global marketplace."

Environmentalists accused the president of sacrificing the Earth's future for short-term political gains. "We are unhappy that Richardson is promoting air travel, which emits large amounts of carbon dioxide into the atmosphere," Earth Concern Network spokeswoman Jane Smith said.

APPROVAL
50%

Election results

The government made solid gains at the ballot box this week. The latest polls show an average approval rating increase of 20%.

The president's policies had a significant positive impact on the final result. The most popular policy was 'Subsidise aviation'.

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CLIMATE CHANGE SUMMIT — **1990**

Do you agree to reduce your CO2 emissions to 1007 megatonnes per decade by the year 2020?

YES   NO

ENVIRONMENT = CO2 drop next turn
PROPOSED TARGET

NORTH AMERICA   EUROPE   NORTH ASIA
SOUTH AMERICA   AFRICA   SOUTH ASIA   PACIFICA

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Well done!

Environment — 80%

During your presidency, Europe emitted a very low level of carbon emissions, which is likely to result in global temperatures increasing by 1.4-2.6C. You substantially outperformed a mid-line forecast for carbon dioxide emissions created by the United Nations Intergovernmental Panel on Climate Change (UN IPCC). Well done!

Wealth — 6%

You left the economy in ruins. Hyper-inflation and joblessness are endemic across Europe. People are starving and crime and lawlessness have taken hold. Extremists have become more influential and threaten to undo any good you did during your presidency.

Popularity — 50%

You were regarded as a capable pair of hands by the voters, neither loved nor reviled. You were able to get the job done and tackle important issues.

The Intergovernmental Panel on Climate Change (IPCC) has predicted that the world may warm 1.4-5.6C by 2100, depending on how much carbon dioxide is emitted during the coming century. Even with low emissions, there will still be some increase in global temperatures. All of the scenarios predict approximately 20-70cm of global sea level rise.

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Climate Game (Demo)

http://office.ranjnet.nl/climategame/

Goal:
Allow children to make a "game" [in our opinion, showing their created content] for other children to create awareness about climate change.

Game mechanics:
- Make a choice from a number of options (in content) to create your own world, concerning living conditions, character creation, and message to the world.
- Presentation to others

Notes:
- Restricted demo
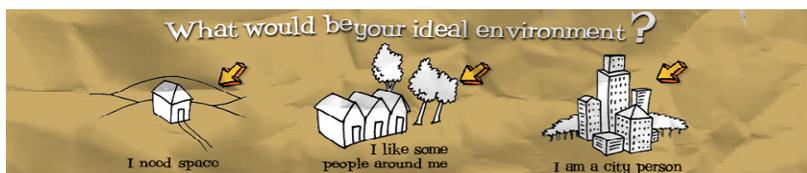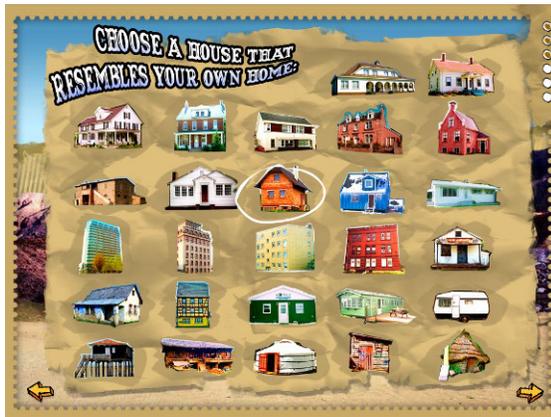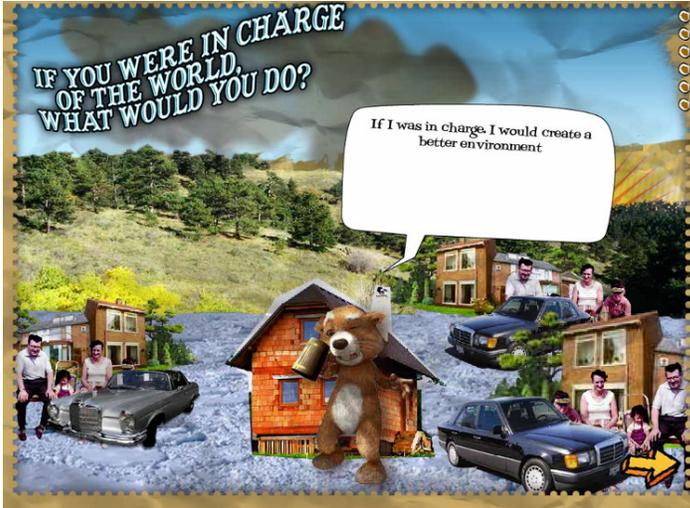
Travelers In-Synch Challenge

Goal:
Inform/create awareness about personal home safety.

Game mechanics:
- Short games (30 seconds), followed by explanation of good answer(s).
- Point 'n click games

Notes:
People can first try to bring their own knowledge into practice, followed by a reflection of the choices made.

Not so good
You should try again

Het klimaatspel
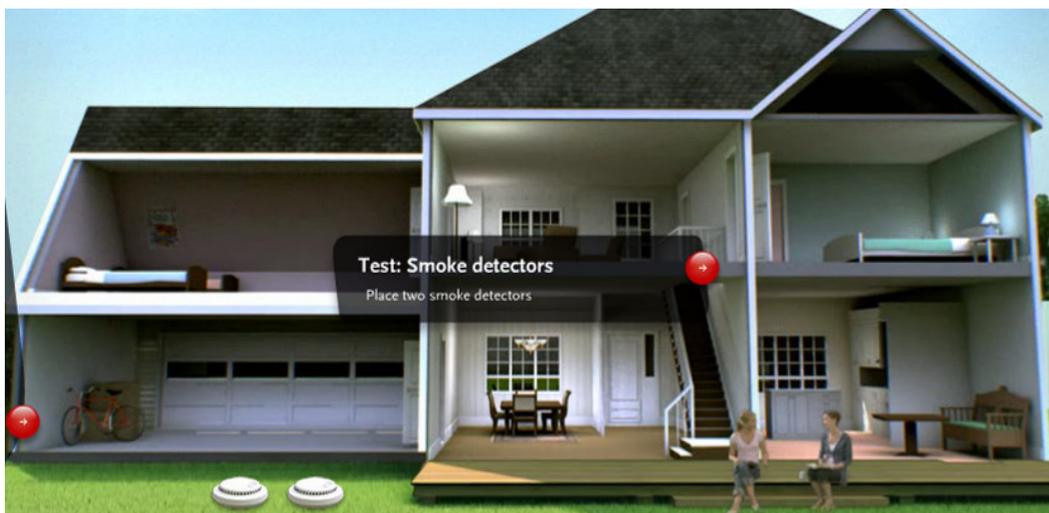
http://www.natuurlijkduurzaam.nl/klimaatspel/

Goal:

Take 4 important decisions concerning the environment and calculate how the world will look like in 50 years. Try to get a score as close to 100 as possible.

Game mechanics:

- Adjust 4 parameters by moving a slider
  - Vacation by plane or bike
  - Heating or woolen sweater
  - Investment solar energy
  - Investment wind energy
- 10 turns

Notes:

A very simple game.

Klimaatspel

Neem vier belangrijke beslissingen over het milieu en laat het
Klimaatspel berekenen hoe de wereld er over 50 jaar uit zal zien!

7 Verder

Voer je gegevens in: poging 1 van 10

Vliegvakantie	82 %	Fietsvakantie	?
Verwarming	49 %	Wollen trui	?
Investering zonne-energie:	75		?
Investering windenergie:	22		?
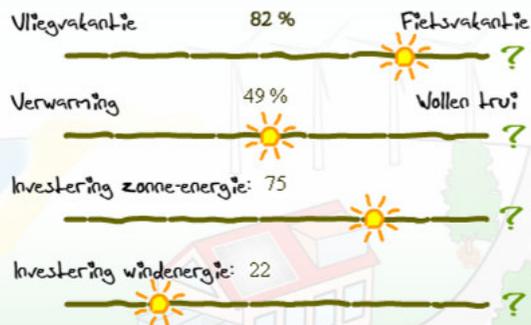
~ Klik voor het resultaat

De resultaten:

Schade door klimaatverandering:
1   ?

Temperatuur atmosfeer: Je hebt 1 van de 10 pogingen gedaan.
88   ?   Je beste welvaartsscore is:

Temperatuur zee: 91
98   ?

Zonne-energie:
817   ?

Windenergie:
447   ?

Welvaart:
91   ?   **7 Verder**

NitroGenius

http://www.serc.nl/play2learn/products/nitrogenius/frameset.htm

Goal:
To solve the Dutch nitrogen problems against the lowest costs and social consequences, while trying to meet the targets associated with one of four roles.

Game Mechanics
- Turn-based with time-limit (16 rounds, 4 minutes per round)
- Earn as much as possible individual points, which are dependant of your specific targets:
  1. for the agricultural representative to increase the agricultural production, make profit, with a positive image;
  2. the industrialist also is concerned about his profits and his image;
  3. the governmental representative wants to be elected and is therefore very concerned about the image;
  4. the society wants jobs, high income and be happy.
- Choose a maximum of three measures per round to affect paramaters/reach targets. Depending on the amount of money you have, you can make decisions.
- After each round, you are informed of the decisions of the other players through a newspaper.
- After a number of rounds you take on another role, which also changes your targets
- Your first role is played for 6 rounds, your second role is played for 4 rounds and your third and fourth roles are played for 3 rounds.
- After the game ends, the player with the overall most points wins and depending on the score get placed into the hall of fame.

Notes
- Available statistical information (graphs, maps etc) doesn't directly help to make ingame decisions.
- It is very easy to play the game by clicking the "Next" button without knowing what's going on.

NitroGenius

a game on nitrogen management

3:55 remaining

Government

Government

Please enter your name below

... then press Log On...

Industry

Please enter your name below

... then press Log On...

Agriculture

Please enter your name below

... then press Log On...

Society

Please enter your name below

... then press Log On...

Scenario

The Nitrogen Problem in the Netherlands

J,

next round you'll be making decisions for the Government

Your budget for the next round is: Meuro 2,000

Your goals for the next round are:

● protect your public image
● support economic growth
● decrease environmental pollution
● guard public health

Agriculture
R2D2

Society
Marvin

Industry
Archie

Next ▸▸▸

Player: J   Score: 0   Budget: Meuro 2,000   Year: 2000 (round 1 of 16)

Ranking

R2D2
0 pts

Marvin
0 pts

J
0 pts

Archie
0 pts

Details

the Daily Journal

September 7, 2001

Wealth or Health

Unemployment alarming

secretary: tax increase inevitable

(advertisement)

FCN

Astronauts balls Up

Last round ...

Effects

Next ▸▸▸

Player: J   Score: 0   Budget: Meuro 2,000   Year: 2000 (round 2 of 16)

Current situation

Decision list

N-deposition
0   Target: 10 kg/ha.yr   90

Groundwater Nitrate
10   Target: 50 mg NO3R   150

Area excess AOT40
0   Target: 100 km2.ppm.hours   500

Happiness
20   Target: 28 %   40

N-concentration in surface water
Target: 2.2 mg/l

Details

- Impose a road use tax (0.1 Euro/km)
- Research Budget
- Lobby for international emission reduction.
- Subsidize Photo Voltaics
- Enable manure processing
- Enable Industry to reduce NOx harbour emissions.
- Subsidise consumers who buy a micro-WKK unit

Government

Charge all private transport a tax on road use of 0.10 Euro/km for gasoline/diesel/ and NG. Tax implementation costs 1 Meuro This will not help your Image!
Image   ----

Cost: Meuro 0

Select extent of the measure
100%
50%
0%

History
N-deposition   Groundwater NO3   Area excess AOT   Happiness

Level →

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Years →

Done ▶▶▶

Player: J   Score: 0   Budget: Meuro 2,000   Year: 2000 (round 2 of 16)

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the Rotten Tomato

J,

the player with the Society role, Marvin, may now cancel one of the intended actions of you or your fellow players. This might take a while. Beware, it might be you the rotten tomato is aimed at!

J, Government

R2D2, Agriculture
○ Low NOx agricultural heating   Meuro 75

Archie, Industry
○ Start an efficiency campaign for transport sector   Meuro 100

First Place

Marvin - 81626

Winner

Second Place

Archie - 81425

Third Place

J - 71088

Fourth Place

R2D2 - 70785

High scores

1. bubba - 117469
2. Archie - 112107
3. Marvin - 104113
4. R2D2 - 101126
5. Marvin - 81626
6. Archie - 81425
7. Archie - 76796
8. J - 71088
9. R2D2 - 70785
10. R2D2 - 70035

Effects

Details

Quit Game

Achievements

estimated effects:

	NH3	NOx	N2O	AOT	NO3gw	Nsw
Agriculture						
Decrease livestock intensity in the south.	----		--		----	----
Decrease intensive livestock.	----		--		---	---
Industry						
(no actions)						
Government						
Research Budget						
Lobby for international emission reduction.						
Society budget negative ??						
Society						
Change your lifestyle						

realised effects:

	NH3	NOx	N2O	AOT	NO3gw	Nsw
since last round:	0.0 %	0.0 %	-0.1 %	0.0 %	-0.2 %	-1.7 %
since game start:	-13.8 %	-27.5 %	-32.6 %	-27.4 %	-6.2 %	-19.2 %

Close
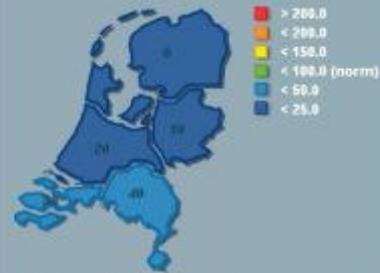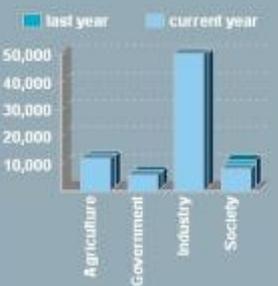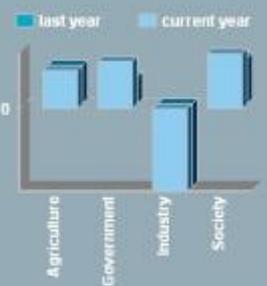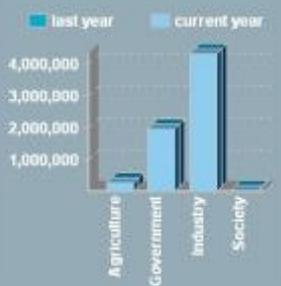
PeaceMaker

Goal:

To establish a stable resolution to the Israeli/Palestinian conflict and win the Nobel Prize before his or her term in office ends.

Game mechanics:
- Turn-based
- 20 role-based actions in 3 main categories:
  - Security
  - Political
  - Construction (long-term and strategic actions)
- Real-time video news events

Notes:

This game makes use of (real-time) video to present events, this seems to create involvement.

PeaceMaker full analysis

- turnbased (one week per turn)
- singleplayer (but option to choose one of two sides)
- 3 difficulty settings (calm, tense, violent)
- non-linear gameplay (mostly in occurence of events)
- events:

  - based on local or world conditions
  - based on previous actions

  - popping up as window (i.e. "news event") with text, video (!), sound and image, or appear on map ("location based") (red = negative, white = neutral) and pop us as window on click

- actions (divided in sections: security, political, construction)

  - not directly linked to events: one default "toolkit" of possible actions, although large and varied, which can be used after all events
  - one action per turn

- "thermometers" showing effect of action on and opinion of different factions/political parties/international pacts (UN, etc), etc. (these influence if certain actions will be seen as positive/are granted!)

- map of Middle-East/Israel & Palestina:

- o for scroll-over/click background information (not of influence on actions)
    - o for showing location based events (see above)

- time of play: +/- 40/45 mins to complete succesfully (?)

- intermediary milestones! (but blind, i.e. one does not know of these beforehand) (gives feeling of gradual progress and helps against repetetive feel) (example: ¼ milestone for Palestinian President: make Gaza a seperate and safe environment)

Miscellaneous:
- save/load
- tri-lingual
- tutorial
- atmospheric music & sound
- advisor function: gives hints & clues in action window (2 advisors: one "dove", one "hawk", giving contradictory advises, to let the player decide!)
- no typical resource count (i.e. certain fundings not always possible, based on underlying money count, no such bar/meter on screen)
- recurring events presented as unique events (using same text and imaging) (i.e. 4 - 5 times in one game "newborn baby centre opened")

Typical mode of play:
- select action -> end turn -> get reactions (positive | negative) as events & shift in thermometers, or
- get event(s) -> select action -> get reactions as events & shift in thermometers

Learning through:
- taking actions and experiencing their influence
- contextual information (timeline with short background info & information given at events & clicking on map to get info)

PRIME MINISTER'S SPEECH FAILS TO IMPRESS

In his speech, the Israeli Prime Minister tried to promote his new peace plan and to call for dialogue, but world leaders were left unimpressed. "I would have been excited by this speech had I not heard the exactly same one again and again for the last 20 years," said a European minister.
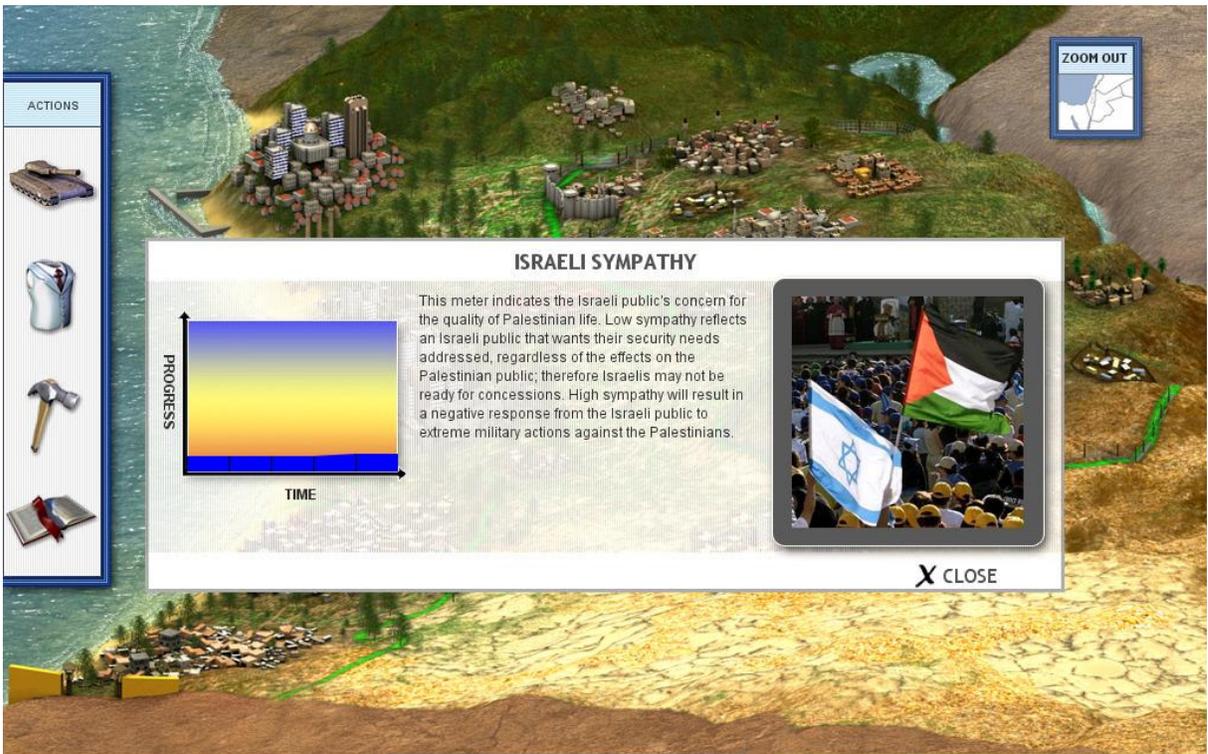
ISRAELI SYMPATHY

This meter indicates the Israeli public's concern for the quality of Palestinian life. Low sympathy reflects an Israeli public that wants their security needs addressed, regardless of the effects on the Palestinian public; therefore Israelis may not be ready for concessions. High sympathy will result in a negative response from the Israeli public to extreme military actions against the Palestinians.

PROGRESS

TIME

X CLOSE

Israeli Prime Minister   25-mrt-2007

GROUPS AND LEADERS   POLLS

10/100   0/100

ISRAELI APPROVAL   PALESTINIAN APPROVAL
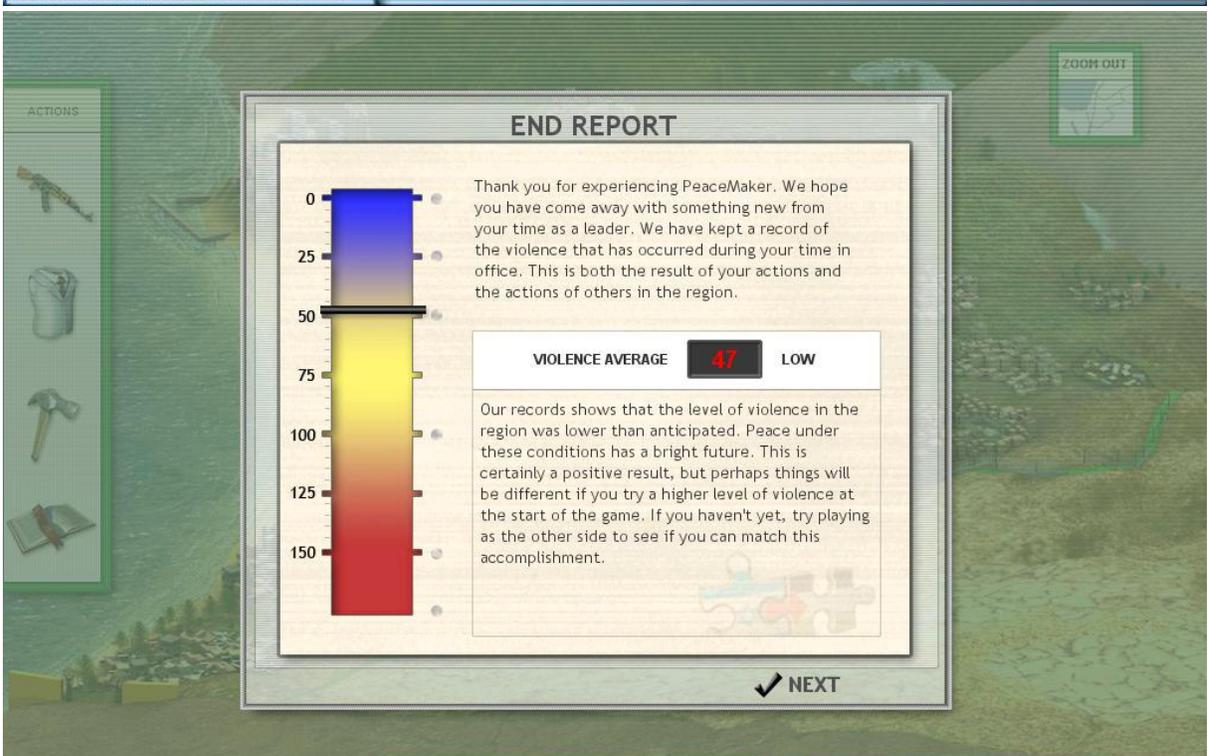
END REPORT

Thank you for experiencing PeaceMaker. We hope you have come away with something new from your time as a leader. We have kept a record of the violence that has occurred during your time in office. This is both the result of your actions and the actions of others in the region.

| VIOLENCE AVERAGE | 47 | LOW |

Our records shows that the level of violence in the region was lower than anticipated. Peace under these conditions has a bright future. This is certainly a positive result, but perhaps things will be different if you try a higher level of violence at the start of the game. If you haven't yet, try playing as the other side to see if you can match this accomplishment.

0
25
50
75
100
125
150

✓ NEXT

Palestinian President   20-jul-2008

GROUPS AND LEADERS   POLLS

100/100   100/100

NATIONAL APPROVAL   WORLD APPROVAL

Earth Command

Game created in 1993 for the Philips CD-i system (discontinued).
http://www.classicgaming.com/blackmoon/reviews/games/ecommand/info.html

Developers' website:
http://www.habitatmedia.org/about.html
(click on *more about habitat media* for information about Earth Command)

Goal:
Solve crises; achieve a world-wide and stable (economic) growth, to save our planet.

Game mechanics:
- The player is the commander of a special space station of the United Nations (Environmental Command, ECOM)
- Continuous time (max. 30 years)
- Game duration 1-4 hours (but you can lose in less than 10 minutes if you perform badly), no saving possibility
- Influencing 6 parameters by making decisions
  - quality of life, population, stability, pollution, climate and economy
  - these parameters can be improving (green), stabilizing (yellow) and getting worse (orange/red)
  - To win, all categories have to be green
  - You lose if all categories are red
- You can make decisions about: (mostly by moving sliders)
  - Worldwide: budget, laws, trade, lifestyle and taxes
  - Countrywide: development aid, budget and sanctions
- You view a world map, where certain events take place (e.g. problems and disasters), indicated by coloured icons. Red icons indicate that there is a severe problem, which must be solved immediately.
- After clicking an icon, you see a small movie about the subject. You can choose to view more information about it by clicking on it (in the form of animated photos and accompanying speech)
- You can zoom in to continents / countries, view specific events and take measures (worldwide or local)
- There is a computer assistant ('IntelAssist'), which provides you with (spoken) advice
- You receive comments by advisors and ECOM's chief, and you will be fired if you perform badly (thereby ending the game)
- The game uses newspapers to communicate certain events or measures

Notes:
- The game is fully translated to Dutch
- It plays a bit slow
- The game can take a long time, but a save function is missing
- The gameplay only consists of selecting objects and moving sliders.

- The use of movies, photos and speech do involve you in the events happening. Unfortunately, after you've seen the information, you can't take measures at once (but need to select the country and move through the menu items). Also, there aren't always applicable measures.
- The movies are generic per subject (so repeated more than once).
- Because you need to control the whole world, there is a lot going on. It isn't always clear what's your own influence to the current state of the world. In addition, you can only view the 6 parameters (worldwide or per region), so you only have general information about it.