CLIMATE CHANGE COLLECTION SCORECARD

Date: 1/27/05

Reviewer: Carrie Morrill

Name of resource: UNEP Vital Climate Graphics

Sponsoring Organization: UNEP

URL: http://www.grida.no/climate/vital/index.htm

Site Homepage: http://www.unep.org RESOURCE WITHIN A SITE? Y / N FOUND THROUGH DLESE? Y / N IF SO, WHICH COLLECTIONS?

RECOMMENDATION YES WITH RESERVATIONS NO

STARS 1 2 3 4 5 (LAME TO STELLAR)

NARRATIVE Background information about climate change, observed trends, and possible impacts. Contains visually-appealing graphics and, for the most part, accurate information. See review for details on inaccuracies.

INTENDED USE

X REFERENCE

__ COMPUTER ACTIVITY

NON-COMPUTER ACTIVITY

EDUCATOR OR LEARNER OR <u>BOTH</u> IF FOR LEARNER, EVIDENCE ITS BEEN TESTED? \underline{Y} / N <u>BEGINNER</u> OR ADVANCED OR BOTH

Easily Printed? Y / N

BUGS & TECHNICAL DIFFICULTIES (PROBLEMATIC TO ROBUST)

1 2 3 4

COMMENTS: No outside links, just text and graphics.

SCIENTIFIC ACCURACY (NATIONAL ENQUIRER TO NATIONAL GEOGRAPHIC)

123**4**

EVIDENCE IT HAS BEEN REVIEWED FOR ACCURACY? \underline{Y} / N

COMMENTS: Most slides are fine, but there are some that could be improved. See list below.

PEDAGOGICAL INFORMATION

X REFERENCE ONLY

TEACHER GUIDE

MATERIALS LIST

___ ASSESSMENT STRATEGIES

___ TIMEFRAME PROVIDED

STANDARDS ALIGNMENT

PROMOTES STUDENT LEARNING (WEAK TO STRONG)

1 2 3 4

APPROPRIATE/EFFECTIVE MULTIMEDIA DESIGN (WEAK TO STRONG)

1 2 3 <u>4</u>

VISUAL APPEAL (WEAK TO STRONG)

1 2 3 <u>4</u>

TEACHING TIPS: Read through this site to get a good overview of climate change science and impacts.

RECOMMENDATIONS FOR DEVELOPER: Some statements are unclear or seem misleading to me:

Slide 1: Text on figure should read "Atmosphere is 0.03% CO2", etc. Depiction of atmosphere is misleading, looks like it extends far into space and that is has uniform density with height. Distance from sun is mentioned, but not discussed further (some readers will notice that Venus is closer to the Sun than the Earth, which is closer to Mars...so why can't this explain the temperature differences?).

Slide 2: Climate goes from ice age to interglacial in a few decades, not vice versa. Text suggests that greenhouse gases caused past climate changes, but this is debated in paleoclimate community (GHG could be responding to climate change). Statement "Anthropogenic emissions of greenhouse gases could bring climate to state where it

reverts to the highly unstable climate of the pre-ice age period" makes no sense. First, what is a "pre-ice age period" The last interglacial? Interglacials seem to be more stable than ice ages, though. For us to "revert" to a highly unstable climate, we would be going back into an ice age. But, we are experiencing global warming, not cooling.

Slide 3: Greenhouse gases depicted as a "lid" with one height at which longwave radiation "bounces" off. But, GHG are diffuse through atmosphere and longwave radiation is absorbed and reemitted (doesn't bounce) at many heights in atmosphere.

Slide 10: What does OECD stand for?

Slide 12: Albedo is reflectivity, not the "reflections" (strange word) themselves. Open water absorbs more radiation (not all radiation) while snow/ice reflect more radiation (not all radiation).

Slide 30: Deep-water is formed in Labrador Sea, as well as Greenland-Norwegian Sea. Statements about thermal forcing vs haline forcing are confusing. Maybe say that haline forcing acts (rather than moves) in opposite direction. Last sentence about "the influx of interdecadal switching" makes no sense. Can't guess what it is supposed to mean.