



Prof Dr Arno Scharl
scharl@weblyzard.com
U4SSC Meeting, Oct 2019

webLyzard
technology

Web Intelligence | Big Data | Visual Analytics

MODUL VIENNA
UNIVERSITY
WKO WIEN PRIVATE UNIVERSITY

Web Intelligence and Visual Analytics for Smart Sustainable Cities



UNEP Live Web Intelligence

unep.ecoresearch.net

Developed by the Department of New Media Technology of
MODUL University Vienna; powered by webLyzard technology
www.weblyzard.com/unep-live ■ unep.ecoresearch.net



Smart City Info Flows
Knowledge Hub
Visual Analytics



UNEP Live WEB INTELLIGENCE

Documents: 0-50 out of 5271 | Date Range: 19 Mar 2016 - 19 May 2016 | Data Source: Multiple / All | Interface Options: Unfiltered / EN | Visualizations: | Export

Region	Count
North America	12912
Europe	12289
Asia and the Pacific	9126
Africa	8087
Latin America and the Caribbean	4774
West Asia	2904
Polar Arctic	984

Topic	Count
UNEP Climate	8881
Food, Energy, Water	8881
Extractive Sector	7841
Air, Climate Change	5271
Oceans, Marine Systems	1972
UNEP	1879
Resource Efficiency	1242
Natural Capital	1215
UNEA-2	394

Current Search: Air, Climate Change (0) 5271

Document	Date	Summary
Jarvis Didn't Change Minds of Vocal Opponents of Monument	05/19	In northern Maine won't place restrictions on land or impose air quality standards that could stymie certain...
Fort McMurray re-entry for wildfire evacuees to begin June 1 - as long as conditions are safe	05/17	Including there being no safety concerns because of fire or air quality, the functioning of critical infrastructure...
2 killed in Falcon Field crash identified; 1 was foreign exchange student from Turkey	05/17	Gregor, a spokesman with the Federal Aviation Administration. A dust storm moved through the area Tuesday...
Umweltschutz in Oberösterreich: 'Keine Belastungen, aber einige Baustellen'	05/16	Teufelhuber von Gyphofsdorf (siehe Interview rechts): Wird die Luftqualität in DO besser oder schlechter? Die S...
IMCO pide actualizar políticas de transporte ante contaminación	05/16	Ante la crisis que padecer la Ciudad de México por la mala calidad del aire y la congestión vehicular, los especia...
Suspenden las clases en el colegio del Quilón y recomiendan confinamiento a los vecinos	05/16	Por otro lado, según los informes de las unidades móviles de calidad del aire instaladas en la zona, se ha obser...
Se suspenden mañana las clases del CEIP 'El Quilón' y se recomienda el confinamiento para la...	05/16	

Visualizations:

- Line Chart:** Shows trends for 'Number of Documents by Topic' from March 2016 to May 2016. The Y-axis ranges from 0 to 100. Two lines are plotted, one showing a significant peak in late April/early May.
- Donut Chart:** Shows 'Number of Documents by Topic' with a 5% segment highlighted in blue.
- World Map:** Displays global connections and data points across various continents.
- Word Cloud:** Lists terms such as 'alberta', 'asthma', 'atmosphere', 'atmospheric', 'cars', 'china', 'cities', 'city', 'cleaning', 'dismount', 'club', 'committee', 'contingency', 'car', 'citra', 'delhi', 'diesel', 'echo', 'moon', 'evacuated', 'fire', 'fort', 'fuels', 'gates', 'inencia', 'index', 'judge', 'khai', 'lax', 'london', 'long', 'madrid', 'mayor', 'medellin', 'megalopolis', 'mexico', 'mobility', 'monitoring', 'motorcycles', 'no2', 'nodes', 'nua', 'otzone', 'particle', 'particulate', 'phase', 'pm10', 'pm2.5', 'points', 'pole', 'pollution', 'responsible', 'restrictions', 'school', 'smart', 'strokes', 'taxi', 'lines', 'traffic', 'transport', 'trump', 'urban', 'valley', 'vehicle', 'vehicles', 'ventilation', 'wildfire', 'wood'.
- Network Diagrams:** Two small network graphs showing relationships between nodes.

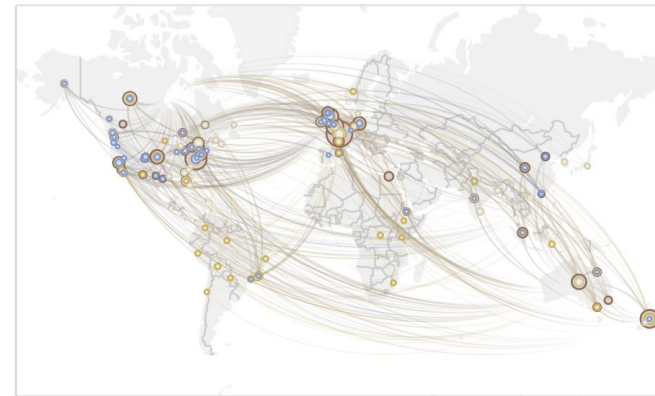
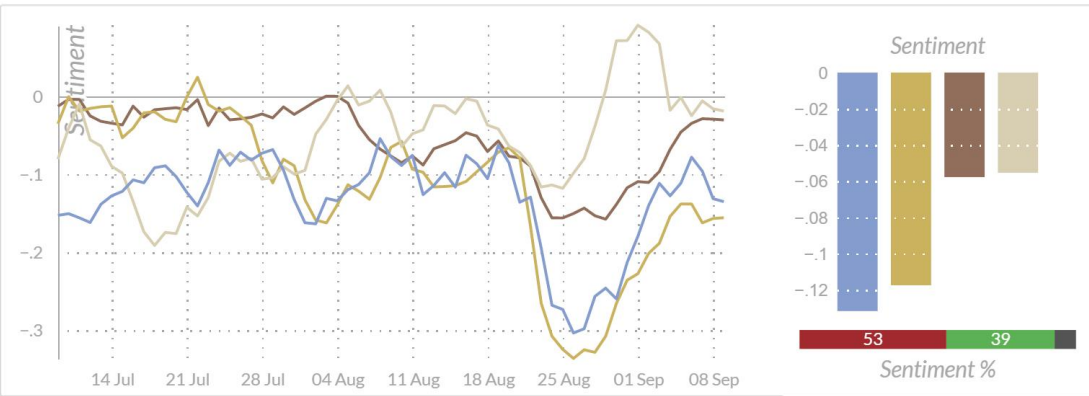
Sustainable Developm 1274



Help Text Bookmarks - Stored Topics, which include predefined and user-defined queries that are searches for quick access, markable for display in various visualizations

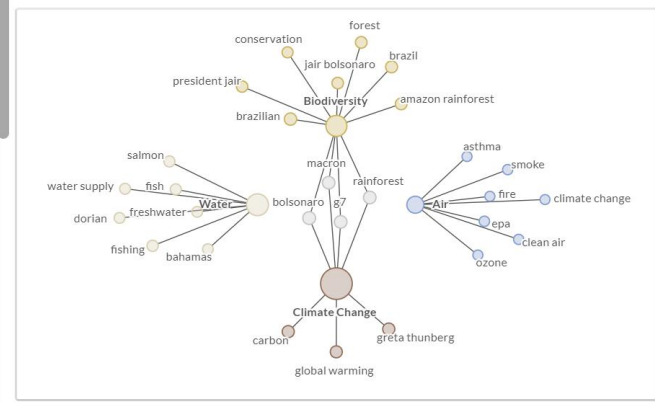
- ASSOCIATIONS
- sustainability 4371
 - bangladesh 4562
 - climate change 16941
 - agenda 11721
 - bolsonaro 2649
 - deforestation 1930
 - poverty 8155
 - biodiversity 2144
 - youth 17934
 - united nations 8684
 - javad zarif 1796
 - brazil 8933
 - indigenous 8182
 - newspaper 26057
 - greta thunberg 1218
 - forum 8906
 - global 56922
 - renewable energy 2541

- BOOKMARKS
- General
- Climate Change 16758
 - Water 5654
 - Biodiversity 4921
 - Air 2282
 - Sustainable Develop... 1274
- UNEP Regions
- Environmental Themes
- Sustainable Development Goals
- 16 - Peace, Justice an... 57350
 - 09 - Infrastructure 18661
 - 01 - No Poverty 8108
 - 08 - Decent Work and... 7721
 - 03 - Good Health and ... 5606
 - 02 - Zero Hunger 4803
 - 10 - Reduced Inequali... 3805
 - 05 - Gender Equality 3365
 - 04 - Quality Education 3152



Description	Count	Reach	Impact	Sentiment
theguardian.com heating · australia · greta thunberg	780	0.9	702	-0.24
nzherald.co.nz ardern · jacinda ardern · country	731	0.9	658	+0.02
scoop.co.nz new zealand · scoopro citizen · carbon	742	0.8	594	+0.37
nytimes.com bolsonaro · macron · deforestation	658	0.9	592	-0.23
reuters.com thomson reuters · bolsonaro · g7	634	0.9	571	-0.24
o.canada.com thomson reuters · trudeau · g7	590	0.9	531	-0.14
seattletimes.com inslee · macron · summit	521	0.9	469	-0.15
independent.co.uk rainforest · davos · economic forum	492	0.9	443	-0.19
straitstimes.com singapore · national day · rally	449	0.9	404	-0.13
theglobeandmail.com update · trudeau · morning update	437	0.9	393	-0.05
edition.cnn.com g7 · rainforest · trump	312	0.9	281	-0.18
startribune.com minnesota · dnr · epa	195	0.9	176	-0.08
newswire.ca	196	0.8	157	+0.77

agriculture amazon arctic asthma bahamas biarritz bolivia
bolsonaro brazil brazilian california carbon
 cleanest co2 coal colorado conservation contamination dam
 deforestation dioxide dorian ecological emission
 environmental epa extinction fire fish fishing forest
 freshwater fuel g7 gas greenland groundwater indigenous
 inslee ipcc jakarta lake land lead macron methane
 newark ozone polluted **rainforest** rebellion reforestation
 salmon sewage shark smoke spill storm summit transport
 trudeau **warming** wastewater whale wildfire wildlife





Smart City Info Flows

Knowledge Hub
Visual Analytics

AGGREGATE, ENRICH & VISUALIZE



Smart City Communities

Stakeholder Engagement
Search & Publishing

PUBLISH & ENGAGE



Cities & Partner Organizations

Brand Communication
Success Metrics

MEASURE & ANALYZE

Benefits of a Dedicated **U4SSC City Intelligence Platform**
including Regional, SDG-Structured Smart City Content



Smart City Info Flows

Knowledge Hub
Visual Analytics



Smart City Communities

Stakeholder Engagement
Search & Publishing

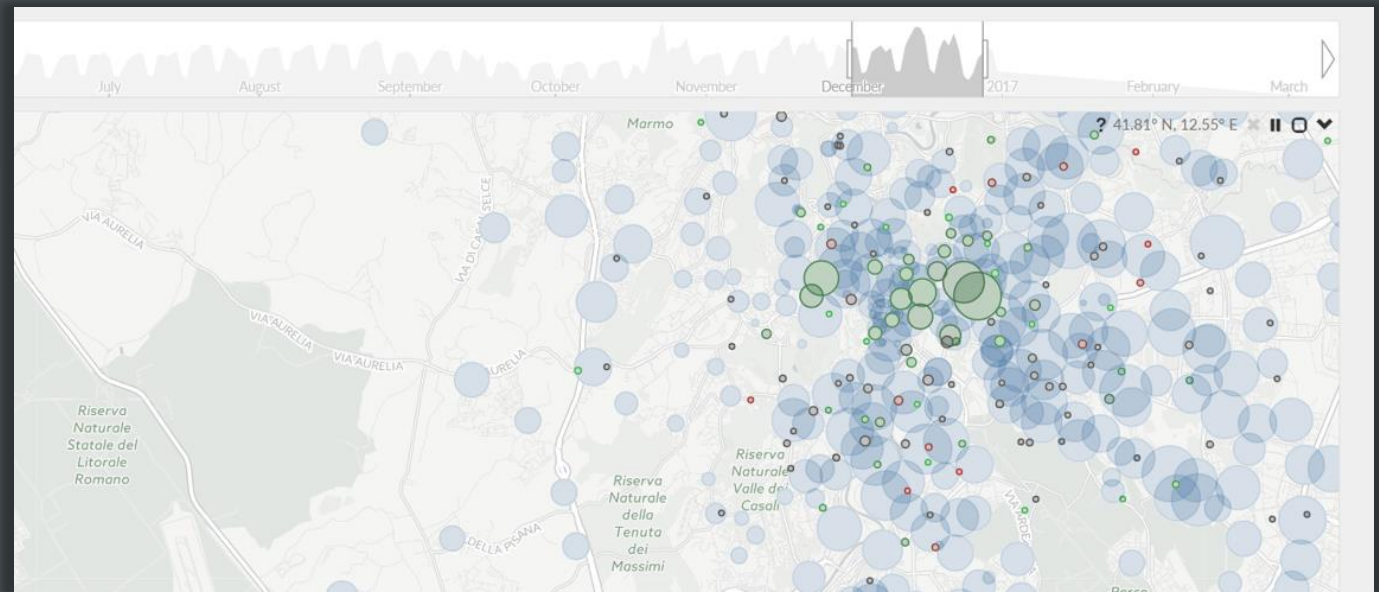


Cities & Partner Organizations

Brand Communication
Success Metrics

Understand not only real-world processes (e.g., human mobility, environmental indicators), but also what drives stakeholder communication and the public debate about these processes:

- **Decision Support Tools** for policy makers and professional stakeholders
- **Novel Information Services** for citizens and local communities





Smart City Info Flows

Knowledge Hub
Visual Analytics



Smart City Communities

Stakeholder Engagement
Search & Publishing



Cities & Partner Organizations

Brand Communication
Success Metrics

Content Production Tools

Maximize the impact of dissemination and public outreach activities
storypact.com

Visual Search Tools

Make city resources more accessible and share evolving community knowledge
weblyzard.com/climate-resilience-toolkit





Smart City Info Flows

Knowledge Hub
Visual Analytics



Smart City Communities

Stakeholder Engagement
Search & Publishing



Cities & Partner Organizations

Brand Communication
Success Metrics

Success Metrics | City KPIs

Track stakeholder perceptions, cross-media impact and opinion leadership to compute new success metrics based on content patterns and city KPIs

AI-Based Predictive Analytics

Anticipate future trends to guide strategic decision making, optimize campaigns and identify potential problems (e.g. mobility bottlenecks)



WISDOM Projects MetV (weblyzSONAR (wysdoDNI), EPOCH (FFG)

Tomorrow Starts Here

48.221° N • 16.359° E | **10** YEARS
Anniversary Edition

www.weblyzard.com



Newsletter

www.weblyzard.com/newsletter



Technology Showcases

www.weblyzard.com/showcases



E-Mail

info@weblyzard.com

Twitter
[@weblyzard](https://twitter.com/weblyzard)



SlideShare

slideshare.com/weblyzard

Facebook

facebook.com/weblyzard



SpeakerDeck

speakerdeck.com/weblyzard

LinkedIn

www.linkedin.com/company/weblyzard-technology



YouTube

youtube.com/+weblyzard

